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EVALUATION CENTER

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RENDERED TO

AREVA NP Inc. 4100 International Plaza Fort Worth, TX 76109



PRODUCTS EVALUATED: Dow Corning® Sylgard 170 Silicone Elastomer, Quantum Silicones QSil 5558MC Silicone Elastomer and Dow Corning® 790 Silicone Building Sealant

EVALUATION PROPERTY: Pressure Resistance (Pressure Test 11)

Report of Testing pressure resistance capabilities for compliance with the applicable requirements of AREVA NP Inc. Test Plan, Document No. 51-9215844-000

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2 Introduction

Intertek Testing Services NA (Intertek) has conducted testing for AREVA NP Inc., on the pressure resistance capabilities of Dow Corning® Sylgard 170 Silicone Elastomer (DC-170), Dow Corning® 790 Building Sealant (DC-790) and Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) through a 12" thick concrete deck for compliance with the applicable requirements of and in accordance with AREVA NP Inc. Document No. 51-9215844-000, Detailed Test Plan for Conducting MOX Pressure Test 11 (Test Plan). This evaluation took place on February 12, 2014.

This project was undertaken to evaluate the pressure resistance capability of elastomer penetration seals for the sealing of openings in alternate building construction (ABC) walls at air pressure increments above atmospheric pressure.

3 Test Samples

3.1. SAMPLE SELECTION

The sealant materials were not independently selected for testing; they were supplied by AREVA NP, Inc., and were received in several shipments from June 3 to June 19, 2013. The samples were received with Certificates of Conformance and are considered traceable. Basic information on sealant material(s) is presented in the table below.

Sealant Material	Lot /Batch#	Expiration Date
DC-170	063B02	6/30/2014
DC-790	0007643997	11/29/2014
QSil 5558 MC	131014	11/4/2014

Information regarding receiving dates and origin of all the materials in the assembly can be found in Appendix F: Quality Documents. All samples were received in good condition at the Evaluation Center.

3.2. SAMPLE AND ASSEMBLY DESCRIPTION

The test deck was used to simulate a confinement zone or HVAC boundary in which the penetration seal assemblies may be installed. The test deck was not considered an integral part of the penetration seal assembly being tested and therefore was not intended to replicate MOX-specific plant conditions and not considered integral in bounding the performance of the penetration seal assemblies (e.g., concrete blend, compressive strength, rebar size and spacing). The test deck will be comprised of normal weight reinforced concrete.

The openings cast into the test deck simulated certain features consistent with MOX penetrations (e.g., painted or coated interior finishes, beveled edges, etc.) as defined by the Test Plan drawings contained in Appendix A.



A detailed description of each penetration can be found in Appendix D, AREVA NP Inc. Engineering Information Record, Document No. 51-9215844-000. Included in that document is a table of revision history with a description of changes made to the approved plan. The installation and documentation of penetration seal assemblies contained within the test slab was performed by AREVA under AREVA's Quality Assurance Program [Reference 12.6] in the test plan found in Appendix D.

The test deck consisted of a 12" thick concrete slab measuring approximately 96" x 96" (8' x 8'). Within this slab there were two openings into which Structo-Crete material was fastened. The concrete openings were 14" x 20" without beveled edges. The penetrations were unlined (bare concrete). The test deck was horizontally oriented with a hemispherical 72" diameter steel pressure vessel mounted on each side of the precast openings in the slab.

- Penetration P1 Test penetration P1 was a 14" x 20" concrete opening containing no penetrating items. Structo-Crete panels were installed within the opening as shown in Appendix A. Structo-Crete panels are generally provided with one side smoother than the other (as a result of the manufacturing process). Two sides of the penetration were lined with the smoother side of the Structo-Crete panels facing the seal material and two sides with the smoother side facing away. This penetration was sealed with an 8" depth of Dow Corning Sylgard® 170 Silicone Elastomer (DC-170) with no permanent damming.
- Penetration P2 Test penetration P2 was a 14" x 20" concrete opening containing no penetrating items. Structo-Crete panels were installed within the opening as shown in Appendix A. Structo-Crete panels are generally provided with one side smoother than the other (as a result of the manufacturing process). Two sides of the penetration were lined with the smoother side of the Structo-Crete panels facing the seal material and two sides with the smoother side facing away. This penetration was sealed with an 8" depth of Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) with no permanent damming.

4 Testing and Evaluation Methods

The Test Plan in Appendix D defines the test methods, acceptance criteria and test report documentation requirements for penetration seal Pressure Test 11. Additionally, this detailed test plan defines the roles and responsibilities of MOX Services, AREVA, the selected testing laboratory, and any other subcontracted entity engaged in support of pressure testing efforts.

The Test Plan also describes the procurement plan for materials associated with penetration seal Pressure Test 11 and identifies the entities responsible for procuring the various components of the test assemblies based on the quality level assigned to each component.

The Test Plan also establishes minimum quality requirements for the penetration seal materials used in the test assemblies and links quality requirements in the AREVA QA program to customer/project quality requirements.



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4.1. TEST APPARATUS

In the absence of any consensus codes or standards related to the pressure testing of penetration seal assemblies, the MOX Penetration Seal Program has developed a standardized method for conducting pressure testing of MOX penetration seal designs. In support of this effort, Intertek assisted in the design and construction of a pressure test apparatus to be use in the conduct of MOX penetration seal pressure tests.

The pressure chamber apparatus consists of two hemispherical 72" diameter steel pressure vessels, calibrated equipment and a data acquisition system. The apparatus accurately maintains the desired air pressure, using one of two sensitive, manually adjustable pressure regulators; a high (0-15 psi) and a low (0-2 psi) range. The sealed collection chamber feeds any leakage air back to the test device, where it is channeled through one of two calibrated flow meters, once again, a high (0-200 L/min) and a low (0-20 L/min) range. A calibrated electronic pressure transducer (0-5 psi) measures the differential pressure between the two chambers and the data acquisition software determines the net pressure drop across the test seal and the leakage through the seal. The chambers are interchangeable and the direction can be reversed very quickly so both can serve as the pressure or the collection chamber.

The primary components described above include the following devices:

Pressure Chamber 2-piece hemispherical 72" diameter steel vessel

3 connection ports per piece

16 flange attachment points per piece

Flange attachment via 3/8" diameter holes @ 22-1/2° spacing





Pressure Cart

Stainless steel rolling cart with control equipment and associated Data Acquisition System





Control Air, Inc., Amherst, NH Type 700 0-2 psi Regulator (low)

Control Air, Inc., Amherst, NH Type 700 0-15 psi Regulator (high)





Mass Flow Meter

Omega Engineering, Inc., Stamford, CT Model No. FMA-872A-V-NIST Serial No. 4270050001001 0-20 lpm



Mass Flow Meter

Omega Engineering, Inc., Stamford, CT Model No. FMA-875A-V-NIST Serial No. 4270050003001 0-200 lpm





Pressure Transducer

Omegadyne Inc., Sunbury, OH Model No. PX409-005 DWUV

Serial No. 406707 Pressure Range: 0-5 psi Input 0-100mVdc





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Power Supply Omega Engineering, Inc., Stamford, CT

Model No. PSS-10 +10V @ 400 mA Input 115 VAC 50/60 Hz

Multifunction DAQ National Instruments,

Model No. NI USB-6210

16 Input, 16-bit, 250 kS/s, Multifunction I/O





Dedicated CPU

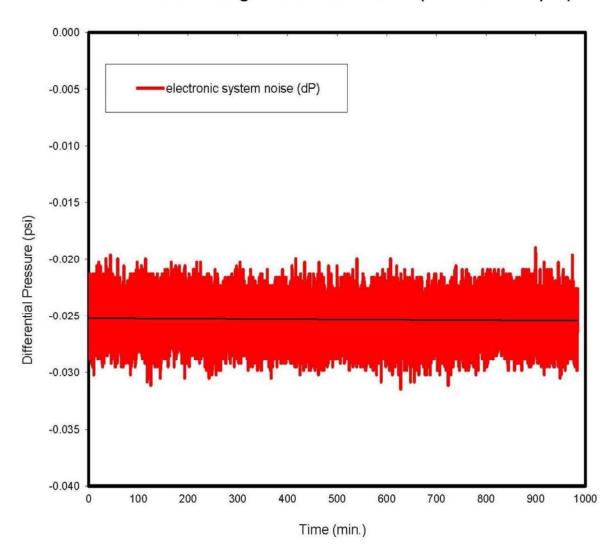
HP Compaq Pro-6300 Microtower Serial No. MXL3090LN6 OS Windows 7 Pro





Additionally, during initial system start-up testing and verification, it was discovered that the data acquisition system (DAQ) was so sensitive that "signal noise" resulted in data fluctuations for reported differential pressure even when the system was at equilibrium (i.e., both high side and low side pressure chambers were at atmospheric conditions). After collecting data for 16 hours overnight, the average fluctuation was -0.025 psi.

16-hr Average Electronic Noise (dP = -0.0253 psi)





Since the initial pressure stage prescribed by the AREVA NP Test Plan is 1.0 inches of water (0.0361 psi) and the average data fluctuation due to "signal noise" was almost 70% of this value (-0.025 psi), it was decided that an inclined-plane manometer would be used to ensure that the Stage 1 differential pressure was applied at precisely 1.0 inches of water.







For subsequent pressure stages (i.e., Stages 2-5), the Test Plan required pressure was applied and maintained using the DAQ reported differential pressure without consideration for any "signal noise". Since the "signal noise" always reported some level of negative pressure at the beginning of the test, this method assured that the tests were conducted with additional margin, as the actual differential pressure that the test specimen was subjected to was equal to the DAQ reported differential pressure plus the additional pressure needed to overcome the negative "signal noise" reported at the beginning of the test when both pressure chambers were at atmospheric conditions.

4.2. TEST STANDARD

AREVA NP Inc. Document No. 51-9215844-000

Pressure rated penetration seals at the MOX facility are required to remain "sufficiently leak-tight" at various pressure levels in order to support the functional goals of the various pressure rating requirements (i.e., confinement, suppression system clean agent concentration, fire induced pressure loads or HVAC pressure boundary loads). The term "sufficiently leak-tight" indicates that the penetration seal meets the predetermined acceptance criteria for the pressure level(s) being tested.

The acceptance criterion that constitutes "sufficiently leak-tight" varies based on the pressure requirement and the operating mode of the plant. For most pressure conditions and operating modes, "sufficiently leak-tight" means that the penetration seal assembly must remain in place but is allowed to leak (i.e., the penetration seal cannot become dislodged from the opening or otherwise catastrophically fail such that a substantial leakage path is created.)

Per MOX Services Calculation *Confinement Boundary Air Leakage Criteria* [Test Plan Reference 12.11], penetration seals that function as confinement zone 3b boundary components must maintain a leakage rate less than 0.01 cfm/sq. ft. of penetration area when tested at a pressure that bounds C3b to non-C3b zone pressures during normal operating conditions.

The table below identifies the differential pressure levels (stages) for conducting pressures tests, as well as, the acceptance criteria in order to be considered "sufficiently leak-tight".

Differential Pressure Test Levels

Test Stage	Differential Pressure (inch w.g.)	Required Hold Time (minutes)	Acceptance Criteria	Basis for the Selected Differential Pressure
1	1.0	30	Leakage <u><</u> 0.01 cfm/sq. ft. of penetration area	Testing at this differential pressure bounds the 0.51 inches w.g. pressure for C3b to C2 areas during normal operation [Test Plan Reference 12.10].



Test Stage	Differential Pressure (inch w.g.)	Required Hold Time (minutes)	Acceptance Criteria	Basis for the Selected Differential Pressure
2	5.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 4.0 inches w.g. pressure anticipated as a result of clean agent suppression system discharge [Test Plan Reference 12.8].
3	10.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 7.0 inches w.g. pressure used as the screening pressure cutoff for fire induced pressures [Test Plan References 12.8 and 12.9] and some of the HVAC pressure boundaries [Test Plan Reference 12.10].
4	20.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the calculated fire induced pressures [Test Plan Reference 12.9] and many of the HVAC pressure boundaries [Test Plan Reference 12.10].
5	40.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the HVAC pressure boundaries [Test Plan Reference 12.10].

Note ¹: 12" x 18" (approximate final dimensions of Structo-Crete lined opening) Dow Corning Sylgard® 170 Silicone Elastomer (DC-170) seal area and 12" x 18" (approximate final dimensions of Structo-Crete lined opening) Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) seal area @ < 0.01 cfm/sq. ft. leakage = maximum leakage of 0.03 cfm.

The test assembly shall be attached to the pressure test apparatus and subjected to air pressure tests at the select pressure levels identified in table above, beginning with the Stage 1 pressure of 1.0 inches w.g. Once this pressure has been obtained, the pressure shall be maintained for the hold time specified. The maximum leakage rate observed during the hold time shall be recorded. If the leakage rate exceeds the acceptance criteria during Stage 1 testing, the time of failure shall be noted and the test shall be continued, since leakage alone does not constitute failure after Stage 1.

Once the designated hold time has been achieved, the pressure shall be increased to the next pressure level identified in the table (Stage 2, then Stage 3, then Stage 4 and finally Stage 5) and held for the designated hold time. The maximum leakage rate observed during each hold time shall be recorded.

Following completion of Stage 5 pressure testing, the test may continue at the discretion of the AREVA test engineer and the testing laboratory manager in charge. Subsequent pressures, hold times and maximum leakage rates shall be recorded as directed by the AREVA test engineer.

If at any pressure level (or test stage) the penetration seal becomes dislodged from the opening or otherwise catastrophically fails, the pressure test shall be terminated and the time to failure and pressure at which the failure occurred shall be recorded.



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5 Testing and Evaluation Results

5.1. RESULTS AND OBSERVATIONS

The test deck was mounted horizontally between two 72" diameter hemispherical pressure vessels. The deck was fixed to the pressure chamber using (16) 5/16" x 2-1/2" long sleeve anchors (Red Head) through 16 pre-drilled holes. Silicone II caulk (GE) was used to create a pressure tight seal between the pressure chamber and the test deck.

The test was initiated at 11:13 a.m. on February 12, 2014. Scott Groesbeck, representing AREVA NP Inc., was present to witness the test. The ambient temperature at the start of the test was 57°F, with a relative humidity of 38%.

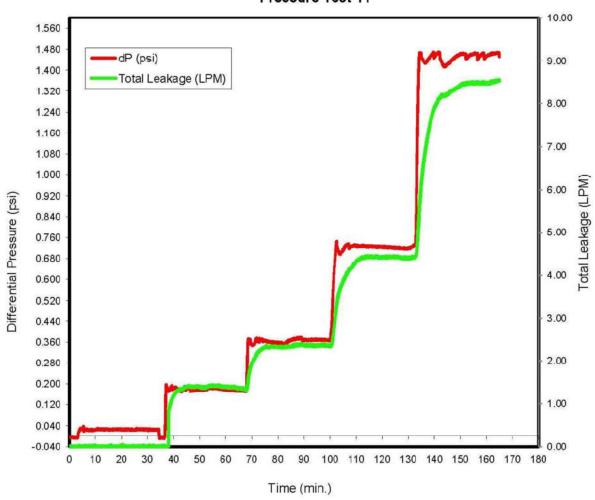
The test procedure followed that presented in Section 9.0 of the Test Plan. The graph and table on the following page(s) provides a summary of results and observations for the five pressure stages, any observed leakage, and the maximum leakage rate. Additionally, the raw data for Pressure Test 11 is contained in Appendix B of this test report. The official start and stop times for each pressure stage were timed using a traceable, calibrated stopwatch. The approximate start and stop times for each pressure stage are recorded below. These start and stop times can be correlated to the data in Appendix B using the heading "Time (min)".

Pressure Test 11 Start and Stop Times

Stage	Start Time	Stop Time
1	4.1	34.1
2	37	67
3	68.5	98.5
4	102	132
5	134	164



Chamber Differential Pressure and Seal Leakage Pressure Test 11



Test Results and Observations

Test Stage	Differential Pressure inch w.g. (psi)	Required Hold Time (minutes)	Acceptance Criteria	PASS/ FAIL	Max Leakage (Total LPM)	Max Leakage (Total cfm)
1	1.0 (0.036)	30	Leakage <u><</u> 0.01 cfm/sq. ft. of penetration area	PASS ¹	0.00	0.00
2	5.0 (0.181)	30	Seal Remains In Place	PASS	1.44	0.051
3	10.0 (0.361)	30	Seal Remains In Place	PASS	2.40	0.085



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Test Stage	Differential Pressure inch w.g. (psi)	Required Hold Time (minutes)	Acceptance Criteria	PASS/ FAIL	Max Leakage (Total LPM)	Max Leakage (Total cfm)
4	20.0 (0.722)	30	Seal Remains In Place	PASS	4.45	0.157
5	40.0 (1.44)	30	Seal Remains In Place	PASS	8.45	0.299

Based on the table above and the allowable leakage for Pressure Test 11 per the Test Plan, the test specimen was allowed to have up to 0.03 cfm of leakage at Stage 1. There was zero actual leakage.

5.2. POST TEST EXAMINATION

Because the test assembly was scheduled to undergo seismic pressure testing the same day (Seismic Test 9), the pressure chamber was not removed and no post test examination was performed.

Refer to the test report for MOX Seismic Pressure Test 9 for additional information (Intertek Test Report 101276459SAT-023 or AREVA NP, Inc. document number 58-9224235-000).



6 Conclusion

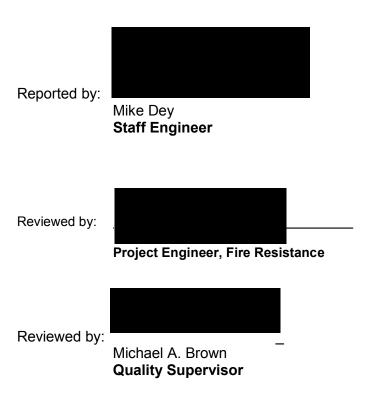
Intertek Testing Services NA (Intertek) has conducted testing for AREVA NP Inc., on the pressure resistance capabilities of Dow Corning® Sylgard 170 Silicone Elastomer (DC-170), Dow Corning® 790 Building Sealant (DC-790) and Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) through a 12" thick concrete deck for compliance with the applicable requirements of and in accordance with AREVA NP Inc. Document No. 51-9215844-000, Detailed Test Plan for Conducting MOX Pressure Test 11. This evaluation took place on February 12, 2014.

The seals in Pressure Test 11 met the acceptance criteria as defined in the test plan

This project was undertaken to evaluate the pressure resistance capability of elastomer penetration seals for the sealing of openings in alternate building construction (ABC) walls at air pressure increments above atmospheric pressure.

The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

INTERTEK TESTING SERVICES NA





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APPENDIX A Assembly Drawings





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Detailed Test Plan for Conducting MOX Pressure Test 11

APPENDIX A: TEST DECK/TEST SLAB DRAWINGS

The test deck (test slab) for Pressure Test 11 is depicted on page A-2.

Page A-1

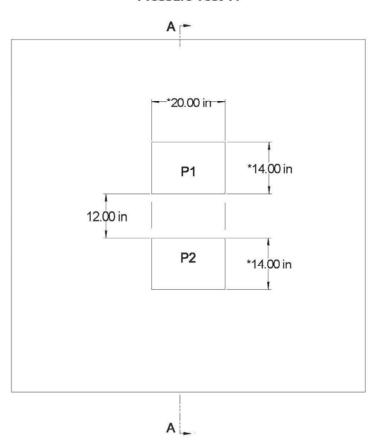




Document No.: 51-9215844-000

Detailed Test Plan for Conducting MOX Pressure Test 11

Pressure Test 11



NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.
- 3. SEE PAGE A-3 FOR SECTION A A.

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Detailed Test Plan for Conducting MOX Pressure Test 11



Section A - A

NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.

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Detailed Test Plan for Conducting MOX Pressure Test 11

APPENDIX B: TEST PENETRATION DRAWINGS

This appendix contains Test Penetration drawings. These drawings identify ABC wall construction within the opening as well as the penetration seal design for each test penetration.

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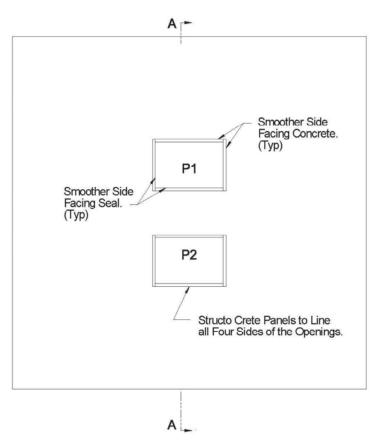




Document No.: 51-9215844-000

Detailed Test Plan for Conducting MOX Pressure Test 11

Pressure Test 11



NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.
- 3. SEE PAGE B-3 FOR SECTION A A.

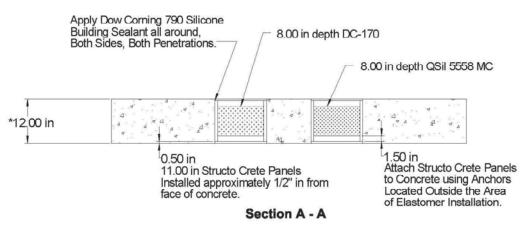
Page B-2





Document No.: 51-9215844-000

Detailed Test Plan for Conducting MOX Pressure Test 11



NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.

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APPENDIX B Test Data



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Time	Ch 1 dP	•	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
0	-0.0016	0	0	0
0.0333	-0.0062	0	0	0
0.0667	-0.0016	0	0	0
0.1	-0.0029	0.0174	0	0.0174
0.1333	-0.0016	0.0174	0	0.0174
0.1667	-0.0055	0.0042	0	0.0042
0.2	-0.0072	0	0.0007	0.0007
0.2333	-0.0036	0.0042	0.0007	0.0049
0.2667	-0.0052	0	0	0
0.3	-0.0072	0	0.0007	0.0007
0.3333	-0.0049	0.0042	0.0007	0.0049
0.3667	-0.0039	0.0042	0.002	0.0062
0.4	-0.0059	0.0174	0.0007	0.018
0.4333	-0.0059	0.0174	0	0.0174
0.4667	-0.0046	0.0042	0	0.0042
0.5	-0.0039	0.0174	0.002	0.0194
0.5333	-0.0049	0.0042	0.002	0.0062
0.5667	-0.0059	0.0042	0.002	0.0062
0.6	-0.0046	0.0042	0	0.0042
0.6333	-0.0062	0	0.0007	0.0007
0.6667	-0.0032	0	0	0
0.7	-0.0065	0	0	0
0.7333	-0.0046	0	0	0
0.7667	-0.0062	0	0.0007	0.0007
0.8	-0.0052	0.0042	0	0.0042
0.8333	-0.0039	0.0174	0.002	0.0194
0.8667	-0.0036	0.0042	0.0007	0.0049
0.9	-0.0065	0.0042	0.002	0.0062
0.9333	-0.0039	0.0042	0.0007	0.0049
0.9667	-0.0032	0.0174	0	0.0174
1	-0.0026	0.0042	0	0.0042
1.0333	-0.0062	0	0.0007	0.0007
1.0667	-0.0042	0.0042	0.002	0.0062
1.1	-0.0006	0.0042	0	0.0042
1.1333	-0.0036	0.0042	0.0007	0.0049
1.1667	-0.0055	0.0042	0	0.0042
1.2	-0.0026	0.0042	0.0007	0.0049
1.2333	-0.0059	0.0042	0.002	0.0062
1.2667	-0.0069	0	0	0
1.3	-0.0049	0.0042	0.002	0.0062
1.3333	-0.0019	0.0042	0.0007	0.0049
1.3667	-0.0036	0.0042	0.0007	0.0049
1.4	-0.0026	0.0042	0	0.0042



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Time (min)	Ch 1 dP	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow
()	(1001)	(2.111)	(2.107)	(=: 1,1)
1.4333	-0.0052	0.0042	0	0.0042
1.4667	-0.0059	0.0042	0.0007	0.0049
1.5	-0.0032	0.0042	0.0007	0.0049
1.5333	-0.0052	0.0042	0	0.0042
1.5667	-0.0026	0.0042	0.0007	0.0049
1.6	-0.0078	0.0042	0	0.0042
1.6333	-0.0069	0.0042	0.0007	0.0049
1.6667	-0.0062	0.0042	0	0.0042
1.7	-0.0069	0	0.002	0.002
1.7333	-0.0052	0	0.0007	0.0007
1.7667	-0.0046	0.0042	0.0007	0.0049
1.8	-0.0039	0.0042	0.0007	0.0049
1.8333	-0.0052	0	0	0
1.8667	-0.0049	0.0042	0	0.0042
1.9	-0.0055	0.0042	0.0007	0.0049
1.9333	-0.0052	0	0	0
1.9667	-0.0092	0.0042	0.0007	0.0049
2	-0.0069	0	0	0
2.0333	-0.0032	0	0.0007	0.0007
2.0667	-0.0049	0.0174	0.0007	0.018
2.1	-0.0072	0.0042	0.002	0.0062
2.1333	-0.0069	0	0.002	0.002
2.1667	-0.0046	0.0174	0.002	0.0194
2.2	-0.0046	0	0.0007	0.0007
2.2333	-0.0046	0.0042	0.0007	0.0049
2.2667	-0.0062	0.0042	0.0007	0.0049
2.3	-0.0036	0.0042	0	0.0042
2.3333	-0.0059	0.0042	0	0.0042
2.3667	-0.0069	0.0042	0	0.0042
2.4 2.4333	-0.0052	0	0.0007	0.0007
2.4555	-0.0042 -0.0072	0	0.002	0.002
2.4667	-0.0072	0	0.002	0.002
2.5333	-0.0049	0.0042	0.002	0.0062
2.5667	-0.0069	0.0042	0.002	0.0002
2.5007	-0.0046	0.0042	0	0.0042
2.6333	-0.0065	0.0042	0.0007	0.0042
2.6667	-0.0055	0.0042	0.002	0.0043
2.7	-0.0072	0.0042	0.002	0.0042
2.7333	-0.0065	0.0042	0	0.0042
2.7667	-0.0049	0.0042	0.0007	0.0007
2.8	-0.0072	0.0042	0.0007	0.0042
2.8333	-0.0062	0	0	0



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Time	Ch 1 dP	Ch 2 High Flow		Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
2.8667	-0.0055	0.0174	0.002	0.0194
2.9	-0.0026	0	0.002	0.002
2.9333	-0.0042	0.0042	0.0007	0.0049
2.9667	-0.0049	0.0042	0.0007	0.0049
3	-0.0069	0.0042	0	0.0042
3.0333	-0.0042	0.0042	0.0007	0.0049
3.0667	-0.0078	0	0	0
3.1	-0.0039	0	0.0007	0.0007
3.1333	-0.0052	0.0174	0.0007	0.018
3.1667	-0.0065	0.0174	0.002	0.0194
3.2	-0.0055	0	0.0033	0.0033
3.2333	-0.0046	0.0042	0	0.0042
3.2667	-0.0069	0.0042	0.0007	0.0049
3.3	-0.0022	0.0042	0	0.0042
3.3333	0.005	0.0042	0.0007	0.0049
3.3667	0.0063	0.0042	0	0.0042
3.4	0.0099	0	0	0
3.4333	0.0086	0.0042	0.002	0.0062
3.4667	0.0122	0.0042	0.0007	0.0049
3.5	0.0129	0.0174	0.0007	0.018
3.5333	0.0132	0	0.0007	0.0007
3.5667	0.0132	0.0174	0.0007	0.018
3.6	0.0142	0.0174	0	0.0174
3.6333	0.0145	0.0042	0.0007	0.0049
3.6667	0.0155	0	0.0007	0.0007
3.7	0.0188	0.0174	0	0.0174
3.7333	0.0198	0.0042	0.0007	0.0049
3.7667	0.0198	0.0174	0.0007	0.018
3.8	0.0215	0.0174	0.0007	0.018
3.8333	0.0198	0.0042	0.0007	0.0049
3.8667	0.0224	0.0174	0	0.0174
3.9	0.0257	0.0305	0.0007	0.0312
3.9333	0.0218	0	0.0007	0.0007
3.9667	0.0238	0.0042	0.002	0.0062
4	0.0267	0	0	0
4.0333	0.027	0	0.0007	0.0007
4.0667	0.0277	0.0042	0.0007	0.0049
4.1	0.0297	0.0042	0	0.0042
4.1333	0.0294	0.0042	0.0007	0.0049
4.1667	0.03	0.0042	0	0.0042
4.2	0.0303	0.0042	0	0.0042
4.2333	0.0267	0.0174	0.0007	0.018
4.2667	0.0307	0	0	0



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
4.3	0.0313	0.0174	0	0.0174
4.3333	0.028	0.0042	0.0007	0.0049
4.3667	0.0303	0.0174	0.002	0.0194
4.4	0.029	0	0	0
4.4333 4.4667	0.03	0.0042	0.0007	0.0049
4.4667	0.028	0.0042	0.0007	0.0042
4.5333	0.0274	0.0042	0.0007	0.0049
4.55667	0.028	0.0042	0.0007	0.0042
4.5667	0.0274	0.0042	0.0007	0.0049
4.6333	0.031	0.00174	0	0.0174
4.6667	0.025	0.0042	0	0.0042
4.0007	0.0294	0.0042	0	0.0042
4.7333	0.0257	0.0174	0.0007	0.0042
4.7667	0.0261	0.0042	0.0007	0.0042
4.7007	0.0287	0.0174	0.0007	0.018
4.8333	0.0237	0.0042	0.0007	0.0049
4.8667	0.0313	0.0042	0.0007	0.0007
4.9	0.0313	0.0042	0.002	0.0062
4.9333	0.0277	0.0042	0.002	0.0042
4.9667	0.0247	0.0174	0.0007	0.018
5	0.0277	0.0042	0.002	0.0062
5.0333	0.027	0.0042	0	0.0042
5.0667	0.0313	0.0174	0.0007	0.018
5.1	0.031	0.0174	0	0.0174
5.1333	0.0317	0	0	0
5.1667	0.032	0.0042	0.002	0.0062
5.2	0.0317	0.0042	0	0.0042
5.2333	0.033	0.0042	0.002	0.0062
5.2667	0.033	0	0.0007	0.0007
5.3	0.0343	0.0042	0.0007	0.0049
5.3333	0.0356	0.0174	0	0.0174
5.3667	0.0359	0.0042	0.0007	0.0049
5.4	0.0382	0	0.0007	0.0007
5.4333	0.0346	0.0042	0.0007	0.0049
5.4667	0.03	0.0174	0.0007	0.018
5.5	0.0251	0	0.0033	0.0033
5.5333	0.0185	0.0042	0.002	0.0062
5.5667	0.0188	0.0042	0	0.0042
5.6	0.0211	0.0174	0.0007	0.018
5.6333	0.0211	0.0042	0	0.0042
5.6667	0.0198	0.0042	0.0007	0.0049
5.7	0.0201	0.0042	0	0.0042



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
F 7222	0.0221	0.0042	0	0.0042
5.7333 5.7667	0.0231	0.0042	0	0.0042 0.0174
5.7667	0.0261	0.0042	0	0.0174
5.8333	0.0244	0.0305	0.0007	0.0042
5.8667	0.0221	0.0303	0.0007	0.0312
5.9	0.0244	0.0042	0.0007	0.0049
5.9333	0.0204	0.0042	0.002	0.0043
5.9667	0.028	0.0174	0.002	0.0174
6	0.027	0.0174	0	0.0174
6.0333	0.027	0.0174	0.0007	0.018
6.0667	0.0264	0.0174	0.0007	0.018
6.1	0.027	0.0042	0.0007	0.0049
6.1333	0.0274	0.0174	0	0.0174
6.1667	0.0254	0.0042	0.0007	0.0049
6.2	0.0274	0	0.0007	0.0007
6.2333	0.0267	0.0042	0.0033	0.0075
6.2667	0.0251	0	0.0007	0.0007
6.3	0.0274	0.0174	0.002	0.0194
6.3333	0.0257	0.0174	0	0.0174
6.3667	0.0274	0.0174	0	0.0174
6.4	0.0264	0.0042	0	0.0042
6.4333	0.0287	0	0.0007	0.0007
6.4667	0.0274	0.0042	0.0007	0.0049
6.5	0.0267	0.0042	0.002	0.0062
6.5333	0.0241	0.0042	0.002	0.0062
6.5667	0.0284	0.0042	0.0007	0.0049
6.6	0.0264	0	0.0007	0.0007
6.6333	0.028	0.0042	0	0.0042
6.6667	0.0267	0	0	0
6.7	0.0251	0	0	0
6.7333	0.0284	0.0174	0.0007	0.018
6.7667	0.0261	0.0042	0.0007	0.0049
6.8	0.027	0	0.002	0.002
6.8333	0.0224	0.0042	0.0007	0.0049
6.8667	0.0264	0.0174	0	0.0174
6.9	0.0244	0	0.0007	0.0007
6.9333	0.0261	0.0174	0	0.0174
6.9667	0.0251	0.0042	0.0007	0.0049
7 0222	0.0247	0.0174	0	0.0174
7.0333 7.0667	0.0257			
	0.0238	0.0174	0.002 0.002	0.0194
7.1 7.1333	0.0254	0.0042	0.002	0.002 0.0042
7.1333	0.0204	0.0042	U	0.0042



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
7.1667	0.0238	0.0042	0.0007	0.0049
7.1007	0.0238	0.0042	0.0007	0.0049
7.2333	0.0244	0.0042	0.002	0.0062
7.2667	0.0257	0.0042	0.002	0.0042
7.2007	0.0237	0.0174	0.002	0.0042
7.3333	0.0261	0.0174	0.0007	0.0134
7.3667	0.0264	0.0042	0.002	0.0062
7.4	0.0238	0.0042	0.002	0.0062
7.4333	0.0218	0.0042	0.0007	0.0049
7.4667	0.0238	0.0305	0.0007	0.0312
7.5	0.0251	0.0042	0.0007	0.0049
7.5333	0.0264	0.0042	0.0007	0.0049
7.5667	0.0257	0.0042	0	0.0042
7.6	0.0244	0.0042	0.0007	0.0049
7.6333	0.0254	0.0174	0.0007	0.018
7.6667	0.0228	0	0.002	0.002
7.7	0.0241	0.0042	0.0007	0.0049
7.7333	0.0228	0	0.002	0.002
7.7667	0.0261	0.0174	0.0007	0.018
7.8	0.0257	0.0042	0.0007	0.0049
7.8333	0.0264	0.0042	0.0007	0.0049
7.8667	0.0251	0	0	0
7.9	0.0231	0.0042	0	0.0042
7.9333	0.0251	0	0.002	0.002
7.9667	0.0234	0.0042	0.0007	0.0049
8	0.0264	0.0042	0.0007	0.0049
8.0333	0.0254	0.0042	0	0.0042
8.0667	0.0264	0.0042	0	0.0042
8.1	0.0277	0.0042	0	0.0042
8.1333	0.0257	0.0042	0.0007	0.0049
8.1667	0.0238	0.0042	0.0007	0.0049
8.2	0.0247	0	0.0007	0.0007
8.2333	0.0254	0	0	0
8.2667	0.0267	0.0042	0	0.0042
8.3	0.0238	0.0042	0	0.0042
8.3333	0.0251	0	0.0033	0.0033
8.3667	0.0247	0.0042	0.0007	0.0049
8.4	0.0267	0.0174	0	0.0174
8.4333 8.4667	0.0254 0.0257	0.0042 0.0305	0.0007	0.0049 0.0305
8.4667	0.0257	0.0303	0.002	0.0303
8.5333	0.0267	0.0042	0.002	0.0062
8.5667	0.0211	0.0174	0	0.0174
0.3007	0.0231	0.0042	U	0.0042



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow
()	(100.7)	(=,	(=:,	(=:,
8.6	0.0267	0.0174	0.0007	0.018
8.6333	0.0247	0.0042	0.0007	0.0049
8.6667	0.0251	0	0.0007	0.0007
8.7	0.0244	0.0042	0	0.0042
8.7333	0.0228	0	0	0
8.7667	0.0231	0	0.0007	0.0007
8.8	0.0234	0	0	0
8.8333	0.0274	0	0.0007	0.0007
8.8667	0.0264	0	0	0
8.9	0.0251	0.0042	0.002	0.0062
8.9333	0.0247	0.0042	0	0.0042
8.9667	0.0238	0.0174	0.002	0.0194
9	0.0247	0.0174	0.0007	0.018
9.0333	0.0234	0.0042	0.0007	0.0049
9.0667	0.0234	0.0174	0	0.0174
9.1	0.0224	0.0042	0.002	0.0062
9.1333	0.0228	0.0042	0.0007	0.0049
9.1667	0.0211	0.0174	0	0.0174
9.2	0.0241	0.0042	0.0007	0.0049
9.2333	0.0261	0.0174	0.0007	0.018
9.2667	0.0224	0.0174	0.002	0.0194
9.3	0.0231	0	0	0
9.3333	0.0231	0.0042	0	0.0042
9.3667	0.0257	0.0042	0.0007	0.0049
9.4	0.0234	0	0.0007	0.0007
9.4333	0.0234	0.0042	0.002	0.0062
9.4667	0.0251	0.0042	0.0007	0.0049
9.5	0.0257	0.0042	0.0007	0.0049
9.5333	0.0267	0.0174	0	0.0174
9.5667	0.0241	0.0174	0.0007	0.018
9.6	0.0241	0.0042	0.0007	0.0049
9.6333	0.0224	0.0174	0.0007	0.018
9.6667	0.0267	0.0042	0.0007	0.0049
9.7	0.0247	0	0.0007	0.0007
9.7333	0.0264	0.0042	0.002	0.0062
9.7667	0.0264	0.0042	0.0007	0.0049
9.8	0.0241	0.0042	0	0.0042
9.8333	0.0247	0.0305	0.002	0.0325
9.8667	0.0261	0.0042	0.0007	0.0049
9.9	0.0234	0	0	0
9.9333	0.0254	0.0042	0	0.0042
9.9667	0.027	0.0042	0.0007	0.0049
10	0.0238	0	0	0



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
		-		
(min)	(psi)	(LPM)	(LPM)	(LPM)
10.0333	0.0264	0.0042	0.0007	0.0049
10.0667	0.0254	0	0.002	0.002
10.1	0.0244	0.0174	0.0007	0.018
10.1333	0.0254	0.0042	0	0.0042
10.1667	0.0277	0.0174	0	0.0174
10.2	0.0261	0.0042	0.002	0.0062
10.2333	0.0238	0	0.0007	0.0007
10.2667	0.0244	0.0042	0	0.0042
10.3	0.0247	0.0042	0	0.0042
10.3333	0.0238	0.0174	0	0.0174
10.3667	0.0257	0.0042	0.002	0.0062
10.4	0.0254	0.0042	0.0007	0.0049
10.4333	0.0284	0	0.002	0.002
10.4667	0.0257	0.0174	0	0.0174
10.5	0.0284	0	0	0
10.5333	0.027	0.0042	0.002	0.0062
10.5667	0.0254	0.0174	0.0007	0.018
10.6	0.0261	0.0174	0	0.0174
10.6333	0.0274	0	0.0007	0.0007
10.6667	0.0261	0.0042	0.002	0.0062
10.7	0.0287	0.0042	0	0.0042
10.7333	0.028	0.0042	0.002	0.0062
10.7667	0.0251	0	0	0
10.8	0.0254	0.0042	0.002	0.0062
10.8333	0.0257	0.0042	0.0007	0.0049
10.8667	0.0254	0.0042	0	0.0042
10.9	0.0307	0.0174	0.0007	0.018
10.9333	0.0254	0.0042	0.0007	0.0049
10.9667	0.0244	0.0042	0.002	0.0062
11	0.0261	0.0042	0.0007	0.0049
11.0333	0.0287	0.0042	0.0007	0.0049
11.0667	0.027	0.0042	0.002	0.0062
11.1	0.0251	0	0.002	0.002
11.1333	0.028	0.0174	0	0.0174
11.1667	0.0297	0.0042	0.0007	0.0049
11.2	0.0294	0.0042	0.0007	0.0049
11.2333	0.027	0.0042	0.0007	0.0049
11.2667	0.0287	0.0042	0.002	0.0062
11.3	0.0247	0.0042	0.0007	0.0049
11.3333	0.027	0.0042	0.002	0.0062
11.3667	0.0284	0.0174	0.0007	0.018
11.4	0.0277	0.0042	0.0007	0.0049
11.4333	0.0303	0.0174	0.002	0.0194



Project No. G101276459SAT-019

Time (min)	Ch 1 dP	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow
(min)	(psi)	(LPIVI)	(LPIVI)	(LPIVI)
11.4667	0.0254	0.0174	0	0.0174
11.5	0.0274	0.0042	0	0.0042
11.5333	0.027	0.0042	0.002	0.0062
11.5667	0.0264	0.0042	0	0.0042
11.6	0.027	0.0042	0.002	0.0062
11.6333	0.028	0.0174	0.0007	0.018
11.6667	0.0274	0.0042	0.0007	0.0049
11.7	0.0284	0	0.002	0.002
11.7333	0.0294	0.0174	0.002	0.0194
11.7667	0.0254	0	0.0007	0.0007
11.8	0.03	0.0174	0.002	0.0194
11.8333	0.0284	0.0042	0.002	0.0062
11.8667	0.0251	0.0042	0.0007	0.0049
11.9	0.0241	0.0042	0.0007	0.0049
11.9333	0.0261	0.0042	0.0007	0.0049
11.9667	0.027	0	0	0
12	0.0277	0.0042	0	0.0042
12.0333	0.0261	0.0174	0	0.0174
12.0667	0.0274	0.0042	0	0.0042
12.1	0.0261	0.0174	0.002	0.0194
12.1333	0.028	0	0.002	0.002
12.1667	0.0277	0.0174	0	0.0174
12.2	0.0261	0.0174	0.0007	0.018
12.2333	0.0244	0.0174	0.0007	0.018
12.2667	0.0264	0.0042	0.002	0.0062
12.3	0.029	0.0042	0.002	0.0062
12.3333	0.0257	0.0042	0.002	0.0062
12.3667	0.0294	0.0174	0	0.0174
12.4	0.028	0	0.0007	0.0007
12.4333	0.0294	0.0042	0.002	0.0062
12.4667	0.0264	0.0042	0.0007	0.0049
12.5	0.027	0.0042	0.002	0.0062
12.5333	0.027	0.0042	0.0007	0.0049
12.5667	0.0257	0.0174	0	0.0174
12.6	0.0257	0.0042	0	0.0042
12.6333 12.6667	0.027	0.0042	0.0007	0.0049
	0.0267	0.0174	0.0007	0.018
12.7	0.0254	0.0174	0.0007	0.018
12.7333 12.7667	0.0267	0.0042 0.0174	0.0007	0.0042
12.7667	0.0251	0.0174		0.018
12.8	0.0244	0.0174	0.002	0.002
12.8333	0.0257	0.0174	0.002	0.0194
12.800/	0.0274	0.0042	0.002	0.0062



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
()	(100.7)	(=:,	(=:,	(=:,
12.9	0.0297	0.0174	0.0007	0.018
12.9333	0.028	0.0042	0.002	0.0062
12.9667	0.0264	0.0174	0.002	0.0194
13	0.0297	0.0042	0.0007	0.0049
13.0333	0.029	0.0042	0.0007	0.0049
13.0667	0.0267	0.0174	0.0007	0.018
13.1	0.0264	0.0042	0.0007	0.0049
13.1333	0.0261	0.0042	0.002	0.0062
13.1667	0.029	0.0042	0	0.0042
13.2	0.0277	0.0042	0.0007	0.0049
13.2333	0.0264	0.0042	0	0.0042
13.2667	0.027	0.0042	0.002	0.0062
13.3	0.0284	0.0174	0	0.0174
13.3333	0.0284	0.0042	0.0007	0.0049
13.3667	0.0231	0.0174	0	0.0174
13.4	0.0261	0.0174	0	0.0174
13.4333	0.0277	0.0042	0.0007	0.0049
13.4667	0.0284	0.0042	0	0.0042
13.5	0.03	0.0174	0.002	0.0194
13.5333	0.0287	0.0042	0.002	0.0062
13.5667	0.027	0.0042	0.002	0.0062
13.6	0.0277	0.0042	0.002	0.0062
13.6333	0.0254	0.0042	0.0007	0.0049
13.6667	0.028	0.0174	0	0.0174
13.7	0.0267	0.0042	0	0.0042
13.7333	0.0267	0.0042	0.002	0.0062
13.7667	0.0251	0.0174	0.002	0.0194
13.8	0.0284	0.0174	0.002	0.0194
13.8333	0.0277	0	0.0007	0.0007
13.8667	0.027	0.0174	0	0.0174
13.9	0.0277	0	0	0
13.9333	0.0294	0	0.002	0.002
13.9667	0.0274	0.0042	0.0007	0.0049
14	0.0264	0.0042	0	0.0042
14.0333	0.0251	0.0042	0.0007	0.0049
14.0667	0.0257	0.0042	0.002	0.0062
14.1	0.0257	0.0042	0.002	0.0062
14.1333	0.0264	0.0042	0.002	0.0062
14.1667	0.0284	0.0174	0	0.0174
14.2	0.0261	0.0042	0.0007	0.0049
14.2333	0.0247	0.0174	0.0007	0.018
14.2667	0.0277	0	0	0
14.3	0.0264	0.0042	0.0007	0.0049



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
14.3333	0.0254	0	0.0007	0.0007
14.3667	0.0284	0.0042	0	0.0042
14.4	0.0254	0.0042	0.002	0.0062
14.4333	0.0264	0.0042	0.0007	0.0049
14.4667	0.0267	0.0042	0.0007	0.0049
14.5	0.0257	0.0174	0.002	0.0194
14.5333	0.0264	0.0042	0.0007	0.0049
14.5667	0.0247	0.0174	0	0.0174
14.6	0.029	0.0042	0.0007	0.0049
14.6333	0.0247	0.0042	0	0.0042
14.6667	0.0257	0.0042	0.0033	0.0075
14.7	0.028	0.0042	0.002	0.0062
14.7333	0.0274	0.0042	0.002	0.0062
14.7667	0.0277	0.0042	0.0007	0.0049
14.8	0.028	0.0042	0.002	0.0062
14.8333	0.0267	0.0174	0.002	0.0194
14.8667	0.0257	0.0174	0.0007	0.018
14.9	0.0254	0	0.0007	0.0007
14.9333	0.0238	0.0042	0	0.0042
14.9667	0.0264	0.0042	0.0007	0.0049
15	0.0277	0.0042	0.002	0.0062
15.0333 15.0667	0.0244	0.0042	0.0007	0.0049
	0.0264	0.0042	0.0007	0.0049
15.1 15.1333	0.0267	0.0174	0.0007	0.018
15.1333	0.0238	0.0042	0.002	0.0042
15.1667	0.0247	0.0042	0.002	0.0062
15.2333	0.0238	0.0042	0.002	0.002
15.2667	0.0241	0.0174	0	0.0042
15.2007	0.0277	0.0042	0.0007	0.0174
15.3333	0.0277	0.0042	0.0007	0.0049
15.3667	0.0258	0.0042	0.0007	0.0049
15.3007	0.0204	0.0042	0.0007	0.0049
15.4333	0.027	0.0305	0.0007	0.0312
15.4667	0.0237	0.0174	0.0007	0.0312
15.5	0.0254	0.0174	0.0007	0.0007
15.5333	0.0254	0.0042	0.0007	0.0007
15.5667	0.0251	0.0042	0.0007	0.0007
15.6	0.0257	0.0042	0.0007	0.0042
15.6333	0.0237	0.0042	0.0007	0.0042
15.6667	0.0244	0.0042	0.0007	0.0007
15.7	0.0244	0.0042	0.0007	0.0049
15.7333	0.0254	0	0.0007	0.0007
13.7333	0.0201	U	0.0007	0.0007



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
15.7667	0.0267	0	0.002	0.002
15.8	0.027	0.0042	0	0.0042
15.8333	0.0267	0	0	0
15.8667	0.027	0.0042	0.002	0.0062
15.9	0.0261	0.0042	0.0007	0.0049
15.9333	0.0251	0.0174	0.002	0.0194
15.9667	0.028	0.0042	0	0.0042
16	0.0287	0.0174	0.0007	0.018
16.0333	0.028	0.0042	0	0.0042
16.0667	0.0251	0.0174	0.0007	0.018
16.1	0.0267	0.0042	0	0.0042
16.1333	0.0264	0.0174	0.0007	0.018
16.1667	0.0257	0.0305	0.002	0.0325
16.2	0.027	0.0042	0	0.0042
16.2333	0.0241	0.0042	0	0.0042
16.2667	0.027	0.0042	0.002	0.0062
16.3	0.0251	0.0042	0.002	0.0062
16.3333	0.028	0.0042	0.0007	0.0049
16.3667	0.0261	0	0.0007	0.0007
16.4	0.0267	0.0042	0	0.0042
16.4333	0.028	0.0174	0.0007	0.018
16.4667	0.028	0.0042	0.002	0.0062
16.5	0.0284	0	0	0
16.5333	0.0267	0	0.0007	0.0007
16.5667	0.0277	0.0042	0	0.0042
16.6	0.0284	0.0042	0.002	0.0062
16.6333	0.028	0.0042	0	0.0042
16.6667 16.7	0.0267	0.0042	0.0007	0.0049
16.7333	0.0284	0.0042	0.0007 0.002	0.0049
16.7667	0.0284	0.0042	0.002	0.0062
16.7667	0.0231	0.0174	0.002	0.0082
16.8333	0.025	0.0174	0.0007	0.0074
16.8667	0.0237	0	0.0007	0.0007
16.8667	0.0247	0.0042	0.002	0.002
16.9333	0.0254	0.0042	0.002	0.0062
16.9667	0.0231	0.0042	0.0007	0.0049
17	0.0277	0.0042	0.0007	0.0049
17.0333	0.029	0	0.0033	0.0033
17.0667	0.029	0.0042	0.0033	0.0033
17.0007	0.0267	0.0174	0.0007	0.0049
17.1333	0.0267	0.0174	0.002	0.0194
17.1333	0.027	0.0174	0.0007	0.018
17.100/	0.028	0.0042	U	0.0042



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow
()	(1231)	(LI IVI)	(LI IVI)	(LI IVI)
17.2	0.0257	0.0174	0	0.0174
17.2333	0.027	0.0042	0	0.0042
17.2667	0.0241	0.0174	0.0007	0.018
17.3	0.0264	0.0042	0.0007	0.0049
17.3333	0.027	0.0042	0.0007	0.0049
17.3667	0.029	0.0174	0	0.0174
17.4	0.0287	0	0.0007	0.0007
17.4333	0.0254	0	0.0007	0.0007
17.4667	0.0257	0.0174	0.0007	0.018
17.5	0.0287	0.0174	0.002	0.0194
17.5333	0.0264	0	0.0007	0.0007
17.5667	0.0274	0.0042	0.0007	0.0049
17.6	0.0274	0	0	0
17.6333	0.0274	0.0042	0	0.0042
17.6667	0.027	0	0.002	0.002
17.7	0.0247	0.0042	0	0.0042
17.7333	0.0247	0.0042	0	0.0042
17.7667	0.0251	0.0174	0.002	0.0194
17.8	0.0247	0.0042	0.002	0.0062
17.8333	0.0247	0.0042	0	0.0042
17.8667	0.0277	0.0042	0.0007	0.0049
17.9	0.0264	0.0174	0.002	0.0194
17.9333	0.0264	0	0.002	0.002
17.9667	0.0238	0.0174	0	0.0174
18	0.0241	0.0174	0.0007	0.018
18.0333	0.0254	0.0042	0.0007	0.0049
18.0667	0.0254	0.0174	0.002	0.0194
18.1	0.0297	0.0042	0.0007	0.0049
18.1333	0.0251	0.0042	0.0007	0.0049
18.1667	0.0251	0.0042	0	0.0042
18.2	0.0244	0.0042	0	0.0042
18.2333	0.0267	0.0042	0	0.0042
18.2667	0.027	0	0.0007	0.0007
18.3	0.0257	0.0042	0.002	0.0062
18.3333	0.027	0	0.0007	0.0007
18.3667	0.0257	0.0174	0.0007	0.018
18.4	0.0254	0.0042	0.0007	0.0049
18.4333	0.028	0.0174	0.002	0.0194
18.4667	0.0261	0.0042	0.0007	0.0049
18.5	0.0241	0.0042	0.0007	0.0049
18.5333	0.0277	0.0042	0	0.0042
18.5667	0.0257	0.0174	0	0.0174
18.6	0.0244	0.0174	0	0.0174



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
40 6000	0.0054	0.0040	0.0007	0.0010
18.6333	0.0251	0.0042	0.0007	0.0049
18.6667	0.0261	0.0042	0.002	0.0062
18.7	0.0247	0	0.002	0.002
18.7333	0.0241	0.0042	0.0007	0.0049
18.7667	0.027	0.0174	0.0007	0.018
18.8	0.0261	0	0	0 0040
18.8333 18.8667	0.0284	0.0042	0.0007	0.0049
	0.0274	0.0042	0.002	0.0062
18.9	0.029	0.0042	0.002	0.0062
18.9333	0.0241	0.0174	0.0007	0.018
18.9667	0.027	0.0174	0.002	0.0194
19	0.0264	0.0174	0	0.0174
19.0333	0.0277	0	0.0007	0.0007
19.0667	0.0254	0.0174	0.0007	0.018
19.1	0.0247	0.0174	0.002	0.0194
19.1333	0.0257	0.0042	0	0.0042
19.1667	0.0267	0.0042	0.002	0.0062
19.2	0.0274	0.0042	0.0007	0.0049
19.2333	0.0267	0.0042	0.0007	0.0049
19.2667	0.0284	0.0042	0.0007	0.0049
19.3	0.0261	0.0042	0.0007	0.0049
19.3333	0.0254	0.0042	0	0.0042
19.3667	0.0257	0.0174	0.002	0.0194
19.4	0.0274	0	0.0007	0.0007
19.4333	0.0287	0.0174	0.002	0.0194
19.4667	0.0267	0.0042	0	0.0042
19.5	0.0264	0	0.002	0.002
19.5333	0.0267	0.0174	0.0007	0.018
19.5667	0.029	0.0174	0.0007	0.018
19.6	0.0251	0.0042	0.0007	0.0049
19.6333	0.0241	0.0174	0.0007	0.018
19.6667	0.029	0.0042	0.0007	0.0049
19.7	0.0251	0.0042	0.002	0.0062
19.7333	0.0297	0	0.0007	0.0007
19.7667	0.0238	0.0174	0	0.0174
19.8	0.0277	0.0305	0.0033 0.0007	0.0338
19.8333	0.0251	0.0042		0.0049
19.8667	0.027	0.0174	0.0007	0.018
19.9 19.9333	0.0251	0.0042	0.0007	0.0049
	0.027	0.0042	0	0.0042
19.9667	0.0267	0.0174	0.002	0.0174
20 20.0333	0.0234	0.0042	0.002	0.0062
20.0333	0.0274	U	U	U



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
20.0667	0.0238	0.0174	0.0007	0.018
20.1	0.0264	0.0042	0.0007	0.0049
20.1333	0.0244	0	0	0
20.1667	0.0251	0.0042	0.0007	0.0049
20.2	0.0254	0.0042	0.002	0.0062
20.2333	0.0247	0.0042	0.0007	0.0049
20.2667	0.0267	0.0437	0.0007	0.0443
20.3	0.028	0.0174	0.0007	0.018
20.3333	0.0257	0	0.0007	0.0007
20.3667	0.027	0	0.0007	0.0007
20.4	0.0284	0.0042	0.0007	0.0049
20.4333	0.0244	0.0042	0.0033	0.0075
20.4667	0.0277	0.0042	0.002	0.0062
20.5	0.0274	0.0042	0	0.0042
20.5333	0.0241	0.0174	0.0007	0.018
20.5667	0.027	0.0174	0	0.0174
20.6	0.0264	0.0174	0	0.0174
20.6333	0.0257	0	0.002	0.002
20.6667	0.0254	0.0174	0.002	0.0194
20.7	0.027	0.0042	0	0.0042
20.7333	0.0254	0.0042	0.002	0.0062
20.7667	0.0234	0.0042	0	0.0042
20.8	0.0257	0.0174	0.0007	0.018
20.8333	0.0244	0.0042	0.0007	0.0049
20.8667	0.0261	0.0042	0.0007	0.0049
20.9	0.0261	0	0.002	0.002
20.9333	0.0277	0.0174	0	0.0174
20.9667	0.0274	0	0.0007	0.0007
21	0.0254	0.0042	0.0007	0.0049
21.0333	0.0231	0.0042	0.0007	0.0049
21.0667	0.0277	0.0042	0	0.0042
21.1	0.0257	0.0174	0.0007	0.018
21.1333	0.028	0.0042	0.0007	0.0049
21.1667	0.0277	0.0042	0	0.0042
21.2	0.0294	0	0	0
21.2333	0.0267	0.0305	0	0.0305
21.2667	0.0277	0	0.002	0.002
21.3	0.027	0	0.0007	0.0007
21.3333	0.0277	0.0042	0	0.0042
21.3667	0.029	0.0042	0	0.0042
21.4	0.0277	0.0042	0.002	0.0062
21.4333	0.0238	0.0174	0.002	0.0194
21.4667	0.0254	0.0042	0.0007	0.0049



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
,,	(100.7)	(=:,	(=,,	(=,
21.5	0.0244	0.0042	0.0007	0.0049
21.5333	0.0241	0.0174	0.0007	0.018
21.5667	0.0254	0.0174	0	0.0174
21.6	0.0274	0.0042	0.0007	0.0049
21.6333	0.028	0.0042	0	0.0042
21.6667	0.0254	0.0174	0.0033	0.0207
21.7	0.0238	0.0042	0.002	0.0062
21.7333	0.0264	0.0174	0	0.0174
21.7667	0.029	0.0042	0.002	0.0062
21.8	0.027	0.0174	0.002	0.0194
21.8333	0.0254	0.0042	0	0.0042
21.8667	0.0231	0.0042	0.002	0.0062
21.9	0.0254	0.0174	0.0007	0.018
21.9333	0.0264	0.0042	0.0007	0.0049
21.9667	0.0257	0.0042	0.0007	0.0049
22	0.0251	0.0042	0.0007	0.0049
22.0333	0.0234	0.0042	0	0.0042
22.0667	0.0254	0.0042	0.0007	0.0049
22.1	0.0267	0.0174	0.0007	0.018
22.1333	0.0241	0.0042	0.0007	0.0049
22.1667	0.0277	0.0174	0	0.0174
22.2	0.029	0.0042	0.0007	0.0049
22.2333	0.0277	0	0.0007	0.0007
22.2667	0.0297	0.0042	0	0.0042
22.3	0.0274	0.0042	0.0007	0.0049
22.3333	0.0251	0.0042	0.002	0.0062
22.3667	0.028	0.0042	0.0007	0.0049
22.4	0.0238	0.0042	0	0.0042
22.4333 22.4667	0.0264	0.0042	0.002	0.0042 0.0062
22.4667	0.0251	0.0042	0.002	0.0062
22.5333	0.0254	0.0042	0	0.0042
22.5667	0.0287	0.0042	0.002	0.0042
22.5007	0.027	0.0042	0.002	0.0062
22.6333	0.0303	0.0042	0.002	0.0062
22.6667	0.0264	0.0042	0.002	0.0042
22.7	0.0274	0.0174	0	0.0174
22.7333	0.0241	0.0174	0	0.0174
22.7667	0.0244	0.0042	0.0007	0.0049
22.8	0.0238	0.0042	0.002	0.0062
22.8333	0.0274	0.0042	0.0007	0.0049
22.8667	0.0241	0.0174	0.0007	0.018
22.9	0.0257	0.0174	0.002	0.0194



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
22.9333	0.0261	0.0042	0	0.0042
22.9667	0.0264	0.0174	0.002	0.0194
23	0.0267	0	0	0
23.0333	0.0254	0	0.0007	0.0007
23.0667	0.0251	0	0.0007	0.0007
23.1	0.0244	0.0174	0.0007	0.018
23.1333	0.0244	0.0042	0	0.0042
23.1667	0.0264	0.0174	0	0.0174
23.2	0.027	0	0.0007	0.0007
23.2333	0.0264	0.0042	0.002	0.0062
23.2667	0.0264	0.0174	0	0.0174
23.3	0.0221	0.0174	0.002	0.0194
23.3333	0.0251	0.0174	0.0007	0.018
23.3667	0.0274	0	0	0
23.4	0.0277	0.0174	0	0.0174
23.4333	0.0241	0.0042	0.002	0.0062
23.4667	0.0287	0.0042	0	0.0042
23.5	0.0267	0.0042	0.0007	0.0049
23.5333	0.0277	0.0042	0.0007	0.0049
23.5667	0.0244	0.0174	0.0007	0.018
23.6	0.0231	0.0042	0.0007	0.0049
23.6333	0.0244	0.0042	0.0007	0.0049
23.6667	0.0224	0	0	0
23.7	0.0257	0.0174	0	0.0174
23.7333	0.0261	0.0174	0.0033	0.0207
23.7667	0.0274	0.0042	0	0.0042
23.8	0.0244	0.0042	0.0007	0.0049
23.8333	0.0297	0.0174	0	0.0174
23.8667	0.0241	0.0042	0.002	0.0062
23.9	0.0224	0.0042	0.002	0.0062
23.9333	0.0244	0	0.002	0.002
23.9667	0.0257	0.0042	0	0.0042
24	0.0261	0	0.0007	0.0007
24.0333	0.0234	0	0.0007	0.0007
24.0667	0.0284	0.0042	0	0.0042
24.1	0.0254	0.0042	0.0007	0.0049
24.1333 24.1667	0.0274	0.0174	0.0007	0.018
	0.0264	0.0042	0.0007	0.0049
24.2	0.0261	0 0043	0	0.0063
24.2333	0.0264	0.0042	0.002	0.0062
24.2667	0.0257	0.0042	0	0.0042
24.3 24.3333	0.0257	0.0042	0.0007	0.0049 0.0042
24.3333	0.0231	0.0042	U	0.0042



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Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
24.3667	0.0231	0.0305	0.0007	0.0312
24.3007	0.0231	0.0042	0.0007	0.0012
24.4333	0.0234	0.0042	0	0.0042
24.4667	0.0254	0.0174	0	0.0042
24.4007	0.0231	0.0174	0	0.0174
24.5333	0.0231	0.0174	0.0007	0.0174
24.5667	0.027	0.0174	0.002	0.0194
24.6	0.0231	0.0174	0.002	0.0174
24.6333	0.0264	0.0174	0	0.0174
24.6667	0.0254	0	0.0007	0.0007
24.7	0.0257	0.0042	0	0.0042
24.7333	0.0254	0.0042	0	0.0042
24.7667	0.0244	0.0042	0.0007	0.0049
24.8	0.0251	0.0174	0.002	0.0194
24.8333	0.0254	0	0.002	0.002
24.8667	0.0264	0.0174	0.0007	0.018
24.9	0.0261	0.0042	0	0.0042
24.9333	0.0254	0.0174	0	0.0174
24.9667	0.0228	0.0042	0.0007	0.0049
25	0.0257	0.0042	0	0.0042
25.0333	0.0241	0.0042	0.0007	0.0049
25.0667	0.0244	0.0042	0	0.0042
25.1	0.0231	0.0174	0.002	0.0194
25.1333	0.0224	0.0042	0.002	0.0062
25.1667	0.0257	0.0042	0	0.0042
25.2	0.0251	0.0042	0.002	0.0062
25.2333	0.0267	0.0174	0.0007	0.018
25.2667	0.027	0.0042	0	0.0042
25.3	0.0244	0.0042	0.002	0.0062
25.3333	0.0277	0.0174	0	0.0174
25.3667	0.0228	0.0042	0.0033	0.0075
25.4	0.0238	0.0042	0.002	0.0062
25.4333	0.027	0.0042	0.002	0.0062
25.4667	0.0257	0.0174	0	0.0174
25.5	0.0284	0.0174	0.0007	0.018
25.5333	0.0264	0.0042	0.0007	0.0049
25.5667	0.027	0.0174	0	0.0174
25.6	0.0257	0.0042	0.0007	0.0049
25.6333	0.0294	0.0042	0.0007	0.0049
25.6667	0.027	0	0	0
25.7	0.028	0.0174	0.002	0.0194
25.7333	0.0294	0.0042	0.0007	0.0049
25.7667	0.0307	0.0174	0.002	0.0194



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow		Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
25.8	0.0277	0	0.002	0.002
25.8333	0.0277	0.0042	0.002	0.002
25.8667	0.03	0	0.0007	0.0007
25.9	0.0284	0.0042	0.002	0.0062
25.9333	0.0303	0.0042	0.002	0.0062
25.9667	0.029	0.0042	0.002	0.0062
26	0.028	0	0	0
26.0333	0.029	0.0042	0.002	0.0062
26.0667	0.0267	0	0.002	0.002
26.1	0.028	0	0	0
26.1333	0.0251	0	0.0007	0.0007
26.1667	0.0294	0.0042	0.0007	0.0049
26.2	0.0303	0.0042	0	0.0042
26.2333	0.028	0.0042	0	0.0042
26.2667	0.0297	0.0042	0.0007	0.0049
26.3	0.0287	0.0042	0.0046	0.0088
26.3333	0.0261	0.0042	0.0007	0.0049
26.3667	0.0277	0	0.0007	0.0007
26.4	0.029	0.0042	0.002	0.0062
26.4333	0.0284	0.0174	0.0007	0.018
26.4667	0.0274	0.0042	0.0007	0.0049
26.5	0.0287	0.0042	0	0.0042
26.5333	0.0274	0.0042	0.002	0.0062
26.5667	0.028	0.0174	0	0.0174
26.6	0.027	0	0.002	0.002
26.6333	0.0294	0.0305	0	0.0305
26.6667	0.0264	0	0.002	0.002
26.7	0.029	0.0042	0.0007	0.0049
26.7333	0.029	0.0042	0.0007	0.0049
26.7667	0.0261	0.0042	0.002	0.0062
26.8	0.0241	0.0042	0.002	0.0062
26.8333	0.0297	0.0042	0	0.0042
26.8667	0.0287	0.0042	0	0.0042
26.9	0.0264	0.0174	0.0007	0.018
26.9333	0.029	0.0042	0.0007	0.0049
26.9667	0.0284	0.0042	0	0.0042
27	0.0261	0.0042	0.002	0.0062
27.0333	0.0267	0.0042	0.0007	0.0049
27.0667	0.029	0.0042	0	0.0042
27.1	0.028	0.0174	0.002	0.0194
27.1333	0.029	0.0042	0.0007	0.0049
27.1667	0.0303	0.0174	0.0007	0.018
27.2	0.0277	0.0042	0.0007	0.0049



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
27.2333	0.028	0.0174	0.002	0.0194
27.2667	0.0267	0	0.0007	0.0007
27.3	0.0267	0.0174	0.002	0.0194
27.3333	0.0303	0.0042	0.0007	0.0049
27.3667	0.0264	0.0042	0.0007	0.0049
27.4	0.0261	0.0042	0.0007	0.0049
27.4333	0.029	0.0174	0.002	0.0194
27.4667	0.029	0	0.002	0.002
27.5	0.0277	0.0042	0.002	0.0062
27.5333	0.0251	0.0042	0.0007	0.0049
27.5667	0.028	0.0042	0.002	0.0062
27.6	0.0294	0.0042	0	0.0042
27.6333	0.027	0	0.0007	0.0007
27.6667	0.0257	0.0042	0.0007	0.0049
27.7	0.028	0.0042	0.0007	0.0049
27.7333	0.0284	0.0042	0.0007	0.0049
27.7667	0.0294	0.0042	0.002	0.0062
27.8	0.0241	0.0174	0.002	0.0194
27.8333	0.0287	0.0042	0.0007	0.0049
27.8667	0.0297	0	0.0033	0.0033
27.9	0.0254	0	0.0007	0.0007
27.9333	0.0254	0.0042	0.002	0.0062
27.9667	0.0257	0.0042	0.0007	0.0049
28	0.0257	0.0174	0.0007	0.018
28.0333	0.0284	0.0042	0.002	0.0062
28.0667	0.0264	0.0042	0	0.0042
28.1	0.028	0.0174	0.002	0.0194
28.1333	0.028	0.0042	0.0007	0.0049
28.1667	0.029	0.0042	0.002	0.0062
28.2	0.0294	0.0042	0.0007	0.0049
28.2333	0.0254	0.0042	0.002	0.0062
28.2667	0.0251	0.0042	0.0007	0.0049
28.3	0.0303	0.0042	0.0007	0.0049
28.3333	0.029	0.0174	0.002	0.0194
28.3667	0.0277	0.0042	0.002	0.0062
28.4	0.0264	0	0.002	0.002
28.4333	0.0274	0.0305	0.002	0.0325
28.4667	0.0277	0.0042	0.002	0.0062
28.5	0.0264	0.0042	0.0007	0.0049
28.5333	0.028	0.0042	0	0.0042
28.5667	0.028	0.0042	0.002	0.0062
28.6	0.0284	0.0042	0	0.0042
28.6333	0.0254	0.0042	0	0.0042



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
		0.0040	2 2227	0.0040
28.6667	0.0294	0.0042	0.0007	0.0049
28.7	0.0264	0.0043	0.0007	0.0007
28.7333	0.0231	0.0042	0.0007	0.0049
28.7667	0.0267	0.0174	0.0007	0.018
28.8	0.0257	0.0042	0	0.0042
28.8333	0.0241	0.0174	0	0.0174
28.8667	0.028	0.0042	0.002	0.0062
28.9	0.0254	0.0174	0	0.0174
28.9333	0.0274	0	0.0007	0.0007
28.9667	0.0257	0.0174	0.0033	0.0207
29	0.0244	0.0042	0.002	0.0062
29.0333	0.0284	0.0042	0.0007	0.0049
29.0667	0.0267	0.0174	0.0007	0.018
29.1	0.028	0.0174	0.0007	0.018
29.1333	0.0264	0.0042	0.002	0.0062
29.1667	0.0274	0.0042	0.002	0.0062
29.2	0.0254	0.0042	0.002	0.0062
29.2333	0.0294	0.0042	0	0.0042
29.2667	0.0264	0.0174	0	0.0174
29.3	0.0284	0.0042	0.0007	0.0049
29.3333	0.0257	0.0042	0	0.0042
29.3667	0.0257	0.0174	0.002	0.0194
29.4	0.029	0.0042	0.0007	0.0049
29.4333	0.0277	0.0042	0.002	0.0062
29.4667	0.0267	0.0042	0.0007	0.0049
29.5	0.027	0.0174	0.0007	0.018
29.5333	0.0257	0.0174	0.0007	0.018
29.5667	0.028	0.0042	0.002	0.0062
29.6	0.027	0.0174	0.002	0.0194
29.6333	0.028	0.0174	0.002	0.0194
29.6667	0.029	0	0.0007	0.0007
29.7	0.0261	0.0174	0.0007	0.018
29.7333	0.0267	0.0042	0.0007	0.0049
29.7667	0.027	0.0042	0.0007	0.0049
29.8	0.0251	0.0042	0.002	0.0062
29.8333	0.0234	0.0174	0.002	0.0194
29.8667	0.0251	0.0174	0.002	0.0194
29.9	0.0251	0.0042	0.0007	0.0049
29.9333	0.0254	0.0042	0.0007	0.0049
29.9667	0.0274	0.0042	0.0007	0.0049
30	0.0257	0	0.0007	0.0007
30.0333	0.0264	0.0174	0.0007	0.018
30.0667	0.0267	0.0042	0.002	0.0062



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
20.4	0.0220			0
30.1 30.1333	0.0238	0.0042	0.002	0.0062
30.1333				
	0.0257	0.0042	0.0007	0.0049
30.2 30.2333	0.0267	0.0042	0.002 0.0007	0.002
30.2333	0.028	0.0042		
30.2667	0.0257	0.0042	0.002 0.0007	0.0062 0.0007
30.3333	0.027	0.0042	0.0007	0.0007
30.3667	0.0218			
		0.0042	0.0007	0.0049
30.4	0.0254	0.0042	0.0007	0.0049
30.4333 30.4667	0.0267	0.0174	0.0007	0.018
30.4667	0.0267	0.0042 0.0174	0.0007	0.0049 0.018
30.5333	0.027	0.0174	0.0007 0.002	0.018
30.5667	0.029	0	0.002	0.002
30.5667	0.0241	0.0042	0.002	0.002
30.6333	0.0281	0.0042	0.002	0.0062
30.6667	0.0287	0.0174	0.002	0.0194
30.6667	0.029	0.0303	0.002	0.0323
30.7333	0.0284	0.0305	0	0.0305
30.7667	0.0267	0.0042	0	0.0303
30.7667	0.0244	0.0042	0.002	0.0042
30.8333	0.0244	0.0174	0.002	0.0002
30.8667	0.0287	0.0174	0.0007	0.0174
30.8007	0.027	0.0042	0.0007	0.018
30.9333	0.0267	0.0174	0.002	0.0174
30.9667	0.0244	0.0174	0	0.0174
31	0.0257	0.0174	0	0.0174
31.0333	0.0241	0.0042	0.002	0.0062
31.0667	0.0274	0.0042	0.002	0.0062
31.1	0.0244	0.0042	0.0007	0.0049
31.1333	0.0267	0.0042	0.002	0.0062
31.1667	0.0254	0	0.0007	0.0007
31.2	0.0254	0.0174	0.0007	0.018
31.2333	0.027	0.0042	0.002	0.0062
31.2667	0.0284	0.0042	0.002	0.0062
31.3	0.0228	0.0174	0	0.0174
31.3333	0.0244	0	0.002	0.002
31.3667	0.0257	0.0042	0.002	0.0062
31.4	0.0274	0.0174	0.002	0.0194
31.4333	0.0234	0.0042	0.0007	0.0049
31.4667	0.0241	0.0174	0.0007	0.018
31.5	0.0224	0.0042	0	0.0042



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow
(111111)	(psi)	(LPIVI)	(LPIVI)	(LPIVI)
31.5333	0.0251	0.0042	0.002	0.0062
31.5667	0.0238	0	0	0
31.6	0.0261	0.0174	0.0007	0.018
31.6333	0.0244	0.0042	0	0.0042
31.6667	0.0238	0.0042	0	0.0042
31.7	0.0247	0.0174	0.0007	0.018
31.7333	0.0267	0	0.0007	0.0007
31.7667	0.0251	0.0174	0.0033	0.0207
31.8	0.0228	0.0042	0.0007	0.0049
31.8333	0.0274	0.0174	0	0.0174
31.8667	0.0238	0.0042	0.002	0.0062
31.9	0.0238	0.0042	0.002	0.0062
31.9333	0.0284	0.0042	0.002	0.0062
31.9667	0.027	0	0.002	0.002
32	0.0244	0	0.0033	0.0033
32.0333	0.0264	0.0042	0	0.0042
32.0667	0.0244	0	0.0007	0.0007
32.1	0.0267	0.0174	0.0007	0.018
32.1333	0.0261	0.0042	0.0007	0.0049
32.1667	0.0224	0.0305	0.0007	0.0312
32.2	0.0238	0.0174	0.0007	0.018
32.2333	0.0247	0.0174	0.0033	0.0207
32.2667	0.0241	0.0042	0.002	0.0062
32.3	0.0234	0.0174	0.002	0.0194
32.3333	0.0264	0.0042	0.0007	0.0049
32.3667	0.0254	0.0174	0.002	0.0194
32.4	0.0244	0.0042	0	0.0042
32.4333	0.027	0.0174	0.0007	0.018
32.4667	0.0231	0.0042	0	0.0042
32.5	0.0267	0.0042	0.0007	0.0049
32.5333	0.0254	0.0042	0	0.0042
32.5667	0.0261	0.0042	0	0.0042
32.6	0.0261	0.0174	0.0007	0.018
32.6333	0.0234	0.0042	0.0033	0.0075
32.6667	0.0274	0.0174	0	0.0174
32.7	0.0241	0	0.0007	0.0007
32.7333	0.0238	0.0174	0.0007	0.018
32.7667	0.0238	0.0042	0.0007	0.0049
32.8	0.0267	0.0042	0.0007	0.0049
32.8333	0.0257	0	0.002	0.002
32.8667	0.0261	0.0042	0.0007	0.0049
32.9	0.0277	0.0042	0.0007	0.0049
32.9333	0.0264	0.0042	0.002	0.0062



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
32.9667	0.0267	0.0042	0.0007	0.0049
33	0.0244	0.0042	0	0.0042
33.0333	0.0264	0.0042	0.0007	0.0049
33.0667	0.0257	0.0174	0.0007	0.018
33.1	0.0244	0.0042	0.002	0.0062
33.1333	0.0264	0.0174	0.0007	0.018
33.1667	0.0261	0.0174	0	0.0174
33.2	0.0254	0.0174	0.0007	0.018
33.2333	0.0241	0	0.002	0.002
33.2667	0.0247	0.0042	0	0.0042
33.3	0.0221	0.0174	0.0007	0.018
33.3333	0.0264	0.0174	0.002	0.0194
33.3667	0.0231	0.0042	0.002	0.0062
33.4	0.0231	0.0174	0	0.0174
33.4333	0.0257	0.0174	0.0007	0.018
33.4667	0.0238	0.0042	0.0007	0.0049
33.5	0.0254	0.0042	0.002	0.0062
33.5333	0.0261	0.0174	0.0007	0.018
33.5667	0.0251	0.0042	0.002	0.0062
33.6	0.0244	0.0174	0.0007	0.018
33.6333	0.0247	0.0042	0.0007	0.0049
33.6667	0.0257	0.0042	0.0007	0.0049
33.7	0.0274	0.0042	0.0007	0.0049
33.7333	0.0241	0.0042	0.002	0.0062
33.7667	0.0261	0.0042	0.0007	0.0049
33.8	0.0261	0	0.0007	0.0007
33.8333	0.0218	0	0.0007	0.0007
33.8667	0.0264	0.0042	0.0007	0.0049
33.9	0.0241	0.0042	0.0007	0.0049
33.9333	0.0244	0.0042	0.002	0.0062
33.9667	0.0261	0.0042	0.002	0.0062
34	0.0254	0	0.002	0.002
34.0333	0.0234	0	0.0007	0.0007
34.0667	0.0264	0.0174	0.002	0.0194
34.1	0.0254	0.0174	0.0007	0.018
34.1333	0.0247	0.0174	0.0033	0.0207
34.1667	0.0218	0.0042	0.0007	0.0049
34.2	0.0224	0.0042	0.0007	0.0049
34.2333	0.0254	0.0042	0.0007	0.0049
34.2667	0.027	0.0042	0.002	0.0062
34.3	0.0277	0.0174	0.002	0.0194
34.3333	0.0215	0.0174	0.0007	0.018
34.3667	0.0251	0.0042	0.0007	0.0049



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
34.4	0.0159	0.0174	0	0.0174
34.4333	0.0109	0.0042	0.0007	0.0049
34.4667	0.0086	0.0042	0	0.0042
34.5	0.0024	0.0174	0	0.0174
34.5333	0.0014	0.0042	0	0.0042
34.5667	-0.0019	0	0	0
34.6	-0.0039	0.0174	0.0007	0.018
34.6333	-0.0085	0.0042	0	0.0042
34.6667	-0.0065	0.0042	0.002	0.0062
34.7	-0.0075	0	0.0007	0.0007
34.7333 34.7667	-0.0095 -0.0085	0.0042	0.002	0.0062
	-0.0085	0.0042 0.0174	0.002	0.0042
34.8 34.8333	-0.0072	0.0174	0.002	0.0194
34.8667	-0.0078	0.0042	0.0007	0.0067
34.8667	-0.0082	0.0042	0.002	0.0062
34.9333	-0.0098	0.0174	0.002	0.0194
34.9667	-0.0052	0.0042	0.002	0.0062
34.9007	-0.0062	0.0042	0.002	0.0062
35.0333	-0.0065	0.0042	0.0007	0.0062
35.0667	-0.0052	0.0174	0.002	0.0002
35.0007	-0.0052	0.0042	0.002	0.0194
35.1333	-0.0032	0.0042	0.002	0.0042
35.1667	-0.0040	0.0174	0.002	0.0002
35.2	-0.0052	0.0042	0.002	0.0134
35.2333	-0.0032	0.0042	0.0007	0.0042
35.2667	-0.0075	0.0174	0.002	0.0194
35.3	-0.0088	0.0042	0.002	0.0154
35.3333	-0.0052	0.0042	0.0007	0.0049
35.3667	-0.0062	0.0042	0.002	0.0043
35.4	-0.0069	0.0042	0.002	0.0062
35.4333	-0.0092	0.0305	0.0007	0.0312
35.4667	-0.0088	0.0042	0.0007	0.0049
35.5	-0.0049	0.0174	0.002	0.0194
35.5333	-0.0052	0.0174	0.0033	0.0207
35.5667	-0.0062	0.0305	0.0007	0.0312
35.6	-0.0055	0.0174	0.002	0.0194
35.6333	-0.0069	0	0.0007	0.0007
35.6667	-0.0069	0.0174	0.0007	0.018
35.7	-0.0065	0.0174	0.0033	0.0207
35.7333	-0.0065	0.0305	0.0007	0.0312
35.7667	-0.0065	0.0042	0.0007	0.0049
35.8	-0.0075	0.0174	0.002	0.0194



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
25 0222	0.0055	0.0174	5000	0.010
35.8333 35.8667	-0.0055 -0.0069	0.0174	0.0007 0.0007	0.018
35.8667				
	-0.0069	0.0042	0.002	0.0062
35.9333 35.9667	-0.0078 -0.0059	0.0174	0.002	0.0194
35.9667			0.0007	0.0049
36.0333	-0.0082 -0.0052	0.0174 0.0042	0.002 0.002	0.0194 0.0062
36.0667	-0.0052	0.0042	0.002	0.0062
36.1	-0.0039		0.0007	
36.1333	-0.0039	0.0042 0.0174	0.002	0.0062 0.018
36.1333	-0.0063	0.0174	0.0007	0.018
36.2	-0.0062	0.0042	0	0.0042
36.2333	-0.0046	0.0042	0.0007	0.0042
36.2667	-0.0082	0.0174	0.0007	0.0007
36.3	-0.0083	0.0305	0.0007	0.0174
36.3333	-0.0052	0.0042	0.0007	0.0049
36.3667	-0.0095	0.0042	0.0007	0.0043
36.4	-0.0055	0.0042	0.0007	0.0042
36.4333	-0.0062	0.0042	0.0007	0.0043
36.4667	-0.0046	0.0174	0.0007	0.0007
36.5	-0.0046	0.0042	0.002	0.0062
36.5333	-0.0049	0.0042	0.0007	0.0002
36.5667	-0.0019	0.0042	0.002	0.002
36.6	0.0017	0.0174	0.002	0.0194
36.6333	0.0109	0.0174	0.0007	0.0134
36.6667	0.0149	0.0174	0.002	0.0194
36.7	0.0211	0.0042	0.0007	0.0049
36.7333	0.0284	0.0174	0.0007	0.018
36.7667	0.0373	0.0174	0.002	0.0194
36.8	0.0547	0.0174	0.002	0.0194
36.8333	0.0764	0.0042	0.0007	0.0049
36.8667	0.1005	0.0042	0.002	0.0062
36.9	0.1261	0.0042	0.002	0.0062
36.9333	0.1508	0.0042	0.0007	0.0049
36.9667	0.1686	0.0174	0.002	0.0194
37	0.1795	0.0174	0.002	0.0194
37.0333	0.1883	0.0174	0	0.0174
37.0667	0.1962	0	0.0007	0.0007
37.1	0.185	0.0042	0	0.0042
37.1333	0.1844	0	0.0007	0.0007
37.1667	0.1949	0.0042	0.002	0.0062
37.2	0.1969	0.0042	0	0.0042
37.2333	0.1913	0.0042	0	0.0042



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
37.2667	0.188	0.0174	0.002	0.0194
37.3	0.1804	0.0042	0.0007	0.0049
37.3333	0.1844	0.0042	0.0007	0.0049
37.3667	0.1887	0.0174	0.002	0.0194
37.4	0.1814	0.0174	0.0007	0.018
37.4333	0.1811	0.0174	0.0033	0.0207
37.4667	0.1887	0.0174	0	0.0174
37.5	0.1854	0.0174	0.002	0.0194
37.5333	0.1874	0.0042	0.0007	0.0049
37.5667	0.1837	0.0042	0	0.0042
37.6	0.1745	0.0174	0.002	0.0194
37.6333	0.1788	0.0042	0.0007	0.0049
37.6667	0.1732	0.0042	0.002	0.0062
37.7	0.1739	0.0042	0	0.0042
37.7333	0.1745	0.0042	0	0.0042
37.7667	0.1739	0.0042	0	0.0042
37.8	0.1739	0.0042	0.002	0.0062
37.8333	0.1752	0.0042	0	0.0042
37.8667	0.1739	0.0174	0.0007	0.018
37.9	0.1702	0.0042	0.0007	0.0049
37.9333	0.1719	0.0174	0.0033	0.0207
37.9667	0.1739	0.0174	0.002	0.0194
38	0.1709	0.0174	0.8133	0.8307
38.0333	0.1722	0.0042	0.8173	0.8215
38.0667	0.1732	0.0042	0.8291	0.8333
38.1	0.1719	0.0042	0.8383	0.8425
38.1333	0.1739	0.0174	0.8436	0.8609
38.1667	0.1716	0.0042	0.8541	0.8583
38.2	0.1729	0.0174	0.8659	0.8833
38.2333	0.1748	0.0042	0.8712	0.8754
38.2667	0.1745	0.0042	0.8778	0.882
38.3	0.1755	0.0042	0.8817	0.8859
38.3333	0.1739	0.0042	0.887	0.8912
38.3667	0.1775	0.0174	0.8988	0.9162
38.4	0.1775	0.0174	0.9133	0.9306
38.4333	0.1762	0.0042	0.9159	0.9201
38.4667	0.1765	0.0042	0.9291	0.9333
38.5	0.1798	0.0174	0.9396	0.9569
38.5333	0.1781	0.0042	0.9422	0.9464
38.5667	0.1814	0.0042	0.9514	0.9556
38.6	0.1781	0.0174	0.9593	0.9767
38.6333	0.1814	0	0.9606	0.9606
38.6667	0.1811	0.0042	0.9698	0.974



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Time		Ch 2 High Flow		
(min)	(psi)	(LPM)	(LPM)	(LPM)
38.7	0.1818	0.0042	0.9724	0.9767
38.7333	0.1864	0.0174	0.9817	0.999
38.7667	0.1841	0.0042	0.9909	0.9951
38.8	0.1877	0.0174	0.9948	1.0122
38.8333	0.1864	0.0305	1.0027	1.0332
38.8667	0.1877	0.0042	1.008	1.0122
38.9	0.188	0.0174	1.0172	1.0345
38.9333	0.186	0.0042	1.0264	1.0306
38.9667	0.1877	0	1.0343	1.0343
39	0.1877	0.0042	1.0395	1.0437
39.0333	0.19	0.0174	1.0356	1.0529
39.0667	0.1877	0	1.0513	1.0513
39.1	0.19	0.0174	1.0592	1.0766
39.1333	0.19	0.0042	1.0671	1.0713
39.1667	0.1897	0.0042	1.0658	1.07
39.2	0.1923	0.0174	1.0698	1.0871
39.2333	0.1906	0.0042	1.0737	1.0779
39.2667	0.1916	0.0042	1.079	1.0832
39.3	0.1939	0.0042	1.0882	1.0924
39.3333	0.191	0	1.0908	1.0908
39.3667	0.1798	0.0305	1.0987	1.1292
39.4	0.1788	0.0042	1.1026	1.1068
39.4333	0.1804	0.0042	1.1105	1.1147
39.4667	0.1801	0.0174	1.1118	1.1292
39.5	0.1765	0.0174	1.1237	1.141
39.5333	0.1798	0.0042	1.1237	1.1279
39.5667	0.1814	0.0174	1.1355	1.1529
39.6	0.1814	0.0174	1.1355	1.1529
39.6333	0.1798	0.0042	1.1355	1.1397
39.6667	0.1788	0.0174	1.1434	1.1608
39.7	0.1827	0	1.1355	1.1355
39.7333	0.1814	0.0174	1.146	1.1634
39.7667	0.1814	0.0042	1.1447	1.1489
39.8	0.1834	0.0042	1.1487	1.1529
39.8333	0.1801	0.0042	1.1513	1.1555
39.8667 39.9	0.1818 0.1818	0.0042	1.1539 1.1565	1.1581 1.1565
39.9333	0.1818	0.0042	1.1565	1.1686
39.9667	0.1827	0.0042	1.1644	1.1818
39.9667	0.1827	0.0174	1.1644	1.1618
40.0333	0.1837	0	1.1697	1.1697
40.0553	0.1811	0.0042	1.1723	1.171
40.0667	0.1844	0.0042	1.1723	1.1765
40.1	0.1034	0.0042	1.1013	1.105/



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
				7.141
40.1333	0.1818	0.0042	1.1868	1.191
40.1667	0.1834	0.0174	1.1894	1.2068
40.2	0.1834	0.0174	1.196	1.2134
40.2333	0.1824	0.0042	1.196	1.2002
40.2667	0.1854	0.0042	1.2013	1.2055
40.3	0.1854	0.0042	1.2013	1.2055
40.3333	0.1844	0.0042	1.2052	1.2094
40.3667	0.1877	0.0042	1.2105	1.2147
40.4	0.1827	0.0174	1.2144	1.2318
40.4333	0.186	0.0174	1.2118	1.2291
40.4667	0.1857	0	1.2197	1.2197
40.5	0.1867	0.0174	1.2223	1.2397
40.5333	0.1887	0.0042	1.2289	1.2331
40.5667	0.1854	0.0042	1.2276	1.2318
40.6	0.186	0.0042	1.2341	1.2383
40.6333	0.185	0.0174	1.2341	1.2515
40.6667	0.1854	0.0174	1.2381	1.2554
40.7	0.1883	0.0174	1.2446	1.262
40.7333	0.186	0.0174	1.246	1.2633
40.7667	0.186	0.0042	1.2446	1.2489
40.8	0.1841	0.0042	1.2486	1.2528
40.8333	0.1864	0.0042	1.2552	1.2594
40.8667	0.1877	0.0042	1.2552	1.2594
40.9	0.1841	0.0174	1.2552	1.2725
40.9333	0.1874	0.0042	1.2499	1.2541
40.9667	0.1857	0.0174	1.2525	1.2699
41	0.1854	0.0174	1.2539	1.2712
41.0333	0.1864	0.0042	1.2591	1.2633
41.0667	0.1814	0.0042	1.2617	1.266
41.1	0.1834	0.0042	1.2644	1.2686
41.1333	0.1844	0.0042	1.2696	1.2738
41.1667	0.1841	0.0042	1.2749	1.2791
41.2	0.1818	0	1.2736	1.2736
41.2333	0.1847	0.0042	1.2815	1.2857
41.2667	0.1831	0.0174	1.2788	1.2962
41.3	0.1798	0.0174	1.2802	1.2975
41.3333	0.1814	0.0174	1.2749	1.2923
41.3667	0.1827	0.0174	1.2802	1.2975
41.4	0.1824	0.0042	1.2867	1.2909
41.4333	0.1831	0.0042	1.2894	1.2936
41.4667	0.1795	0.0174	1.2867	1.3041
41.5	0.1788	0.0042	1.2986	1.3028
41.5333	0.1804	0.0174	1.2986	1.3159



Project No. G101276459SAT-019

Time (min)	Ch 1 dP	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
(111111)	(psi)	(LPIVI)	(LFIVI)	(LFIVI)
41.5667	0.1801	0.0042	1.2972	1.3015
41.6	0.1801	0.0174	1.3012	1.3185
41.6333	0.1808	0.0174	1.3012	1.3185
41.6667	0.1775	0.0042	1.2986	1.3028
41.7	0.1798	0.0174	1.2986	1.3159
41.7333	0.1781	0.0042	1.2986	1.3028
41.7667	0.1775	0	1.2999	1.2999
41.8	0.1762	0.0174	1.3078	1.3251
41.8333	0.1781	0.0042	1.3104	1.3146
41.8667	0.1758	0.0042	1.3091	1.3133
41.9	0.1752	0.0042	1.3157	1.3199
41.9333	0.1755	0.0174	1.3078	1.3251
41.9667	0.1768	0.0174	1.3065	1.3238
42	0.1742	0.0042	1.3143	1.3185
42.0333	0.1771	0.0174	1.3104	1.3278
42.0667	0.1739	0.0042	1.3143	1.3185
42.1	0.1745	0.0042	1.3183	1.3225
42.1333	0.1748	0.0042	1.3183	1.3225
42.1667	0.1739	0.0042	1.3222	1.3264
42.2	0.1719	0.0174	1.3222	1.3396
42.2333	0.1745	0.0042	1.3235	1.3278
42.2667	0.1748	0.0174	1.3183	1.3356
42.3	0.1729	0	1.3235	1.3235
42.3333	0.1739	0.0042	1.3196	1.3238
42.3667	0.1729	0.0042	1.3196	1.3238
42.4	0.1762	0.0305	1.3249	1.3554
42.4333	0.1752	0.0174	1.3262	1.3435
42.4667	0.1745	0.0174	1.3249	1.3422
42.5	0.1742	0.0042	1.3275	1.3317
42.5333	0.1739	0.0042	1.3262	1.3304
42.5667	0.1719	0.0174	1.3275	1.3448
42.6	0.1739	0	1.3196	1.3196
42.6333	0.1732	0	1.3249	1.3249
42.6667	0.1719	0.0174	1.3288	1.3462
42.7	0.1722	0.0174	1.3275	1.3448
42.7333	0.1739	0.0042	1.3249	1.3291
42.7667	0.1735	0.0174	1.3262	1.3435
42.8	0.1739	0.0042	1.3275	1.3317
42.8333	0.1689	0.0042	1.3235	1.3278
42.8667	0.1712	0.0042	1.3249	1.3291
42.9	0.1729	0.0042	1.3222	1.3264
42.9333	0.1729	0.0042	1.3249	1.3291
42.9667	0.1706	0.0042	1.3262	1.3304



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Time		Ch 2 High Flow		
(min)	(psi)	(LPM)	(LPM)	(LPM)
43	0.1720	0.0174	1 2275	1 2440
43.0333	0.1729	0.0174	1.3275 1.3275	1.3448 1.3317
43.0667	0.1712			
		0.0042	1.3301	1.3343
43.1	0.1689	0.0174	1.3288	1.3462
43.1333	0.1706	0.0042	1.3314	1.3356
43.1667	0.1729	0.0174	1.3301	1.3475
43.2	0.1742	0.0042	1.3341	1.3383
43.2333	0.1739	0.0174	1.3314	1.3488
43.2667	0.1739	0.0042	1.3301	1.3343
43.3	0.1732	0.0042	1.3328	1.337
43.3333	0.1755	0.0174	1.3314	1.3488
43.3667	0.1771	0.0042	1.3314	1.3356
43.4	0.1755	0.0042	1.3275	1.3317
43.4333	0.1775	0.0042	1.3367	1.3409
43.4667	0.1762	0.0174	1.3341	1.3514
43.5	0.1795	0.0174	1.3406	1.358
43.5333	0.1762	0.0042	1.3367	1.3409
43.5667	0.1818	0.0042	1.338	1.3422
43.6	0.1824	0.0042	1.3393	1.3435
43.6333	0.1785	0.0042	1.3446	1.3488
43.6667	0.1801	0.0174	1.3485	1.3659
43.7	0.1821	0.0042	1.3485	1.3527
43.7333	0.185	0.0042	1.3512	1.3554
43.7667	0.1857	0.0042	1.3512	1.3554
43.8	0.1854	0.0174	1.3538	1.3711
43.8333	0.1854	0.0174	1.3591	1.3764
43.8667	0.1877	0.0174	1.363	1.3804
43.9	0.1857	0.0042	1.363	1.3672
43.9333	0.1864	0.0042	1.3617	1.3659
43.9667	0.1864	0.0042	1.3617	1.3659
44	0.187	0.0174	1.3577	1.3751
44.0333	0.1874	0.0042	1.3656	1.3698
44.0667	0.191	0.0174	1.3696	1.3869
44.1	0.1824	0.0042	1.3683	1.3725
44.1333	0.1785	0.0174	1.3709	1.3882
44.1667	0.1841	0.0174	1.3669	1.3843
44.2	0.186	0.0042	1.3748	1.379
44.2333	0.1827	0	1.3748	1.3748
44.2667	0.1854	0.0174	1.3709	1.3882
44.3	0.1831	0.0042	1.3735	1.3777
44.3333	0.1857	0	1.3722	1.3722
44.3667	0.1847	0.0042	1.3735	1.3777
44.4	0.1867	0.0174	1.3761	1.3935



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
44.4333	0.186	0.0174	1.3761	1.3935
44.4667	0.1864	0.0042	1.3761	1.3804
44.5	0.1857	0.0042	1.3722	1.3764
44.5333	0.1755	0.0174	1.3761	1.3935
44.5667	0.1781	0.0042	1.3801	1.3843
44.6	0.1775	0.0042	1.384	1.3882
44.6333	0.1762	0	1.3788	1.3788
44.6667	0.1781	0.0174	1.3801	1.3974
44.7	0.1785	0.0042	1.3761	1.3804
44.7333	0.1778	0	1.3801	1.3801
44.7667	0.1798	0.0042	1.3801	1.3843
44.8	0.1791	0.0042	1.3867	1.3909
44.8333	0.1814	0.0042	1.384	1.3882
44.8667	0.1795	0.0174	1.3867	1.404
44.9	0.1818	0	1.384	1.384
44.9333	0.1804	0.0174	1.3801	1.3974
44.9667	0.1795	0.0305	1.3827	1.4132
45	0.1818	0.0042	1.3854	1.3896
45.0333	0.1844	0.0174	1.388	1.4053
45.0667	0.1811	0.0042	1.3946	1.3988
45.1	0.1827	0.0042	1.3932	1.3974
45.1333	0.1844	0.0042	1.3854	1.3896
45.1667	0.1827	0.0174	1.3867	1.404
45.2	0.1844	0.0042	1.3919	1.3961
45.2333	0.1834	0.0042	1.3867	1.3909
45.2667	0.185	0.0042	1.3919	1.3961
45.3	0.1841	0.0174	1.3919	1.4093
45.3333	0.1831	0.0042	1.388	1.3922
45.3667	0.185	0.0042	1.3906	1.3948
45.4	0.186	0.0042	1.3919	1.3961
45.4333	0.187	0.0174	1.3919	1.4093
45.4667	0.1857	0	1.3932	1.3932
45.5	0.1864	0.0174	1.3946	1.4119
45.5333	0.1857	0.0042	1.3959	1.4001
45.5667	0.1877	0.0042	1.3985	1.4027
45.6	0.1844	0.0174	1.4011	1.4185
45.6333	0.1841	0	1.3972	1.3972
45.6667	0.1867	0.0042	1.4024	1.4067
45.7	0.1867	0.0174	1.3985	1.4159
45.7333	0.1887	0.0174	1.4038	1.4211
45.7667	0.1883	0.0042	1.4011	1.4053
45.8	0.1874	0.0042	1.4024	1.4067
45.8333	0.1877	0	1.3985	1.3985



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Time	Ch 1 dP	Ch 2 High Flow		
(min)	(psi)	(LPM)	(LPM)	(LPM)
45.8667	0.1883	0.0174	1,4064	1.4237
45.9	0.1887	0.0174	1.3998	1.4172
45.9333	0.1903	0.0042	1.4038	1.408
45.9667	0.1906	0.0042	1.3985	1.3985
46	0.1906	0.0042	1.4038	1.408
46.0333	0.188	0.0042	1.3998	1.404
46.0667	0.187	0.0042	1.4077	1.4119
46.1	0.1837	0.0174	1.3985	1.4159
46.1333	0.1867	0.0042	1.3959	1.4001
46.1667	0.1854	0	1.3985	1.3985
46.2	0.1857	0.0174	1.3998	1.4172
46.2333	0.1897	0.0174	1.3985	1.4159
46.2667	0.1854	0.0174	1.3985	1.4159
46.3	0.187	0.0042	1.3946	1.3988
46.3333	0.1788	0.0042	1.3959	1.4001
46.3667	0.1725	0.0042	1.3959	1.4001
46.4	0.1716	0.0042	1.3946	1.3988
46.4333	0.1722	0.0042	1.3919	1.3961
46.4667	0.1699	0.0174	1.3946	1.4119
46.5	0.1742	0	1.3919	1.3919
46.5333	0.1712	0.0174	1.3906	1.408
46.5667	0.1735	0	1.3854	1.3854
46.6	0.1745	0	1.3854	1.3854
46.6333	0.1745	0.0042	1.388	1.3922
46.6667	0.1771	0.0042	1.3867	1.3909
46.7	0.1716	0.0174	1.3854	1.4027
46.7333	0.1752	0.0042	1.3854	1.3896
46.7667	0.1768	0.0042	1.388	1.3922
46.8	0.1745	0.0174	1.3867	1.404
46.8333	0.1755	0.0042	1.3827	1.3869
46.8667	0.1712	0.0042	1.3788	1.383
46.9	0.1745	0.0042	1.3788	1.383
46.9333	0.1745	0.0042	1.3748	1.379
46.9667	0.1768	0	1.384	1.384
47	0.1752	0.0042	1.3827	1.3869
47.0333	0.1732	0	1.3814	1.3814
47.0667	0.1778	0.0305	1.3814	1.4119
47.1	0.1775	0.0042	1.384	1.3882
47.1333	0.1739	0.0174	1.3775	1.3948
47.1667	0.1745	0.0042	1.3775	1.3817
47.2	0.1758	0	1.3775	1.3775
47.2333	0.1748	0.0042	1.3867	1.3909
47.2667	0.1775	0.0042	1.3788	1.383



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
47.3	0.1725	0	1.3814	1.3814
47.3333	0.1778	0.0042	1.388	1.3922
47.3667	0.1768	0.0042	1.3867	1.3909
47.4	0.1755	0.0042	1.3827	1.3869
47.4333	0.1778	0.0042	1.3854	1.3896
47.4667	0.1748	0.0042	1.3854	1.3896
47.5	0.1765	0	1.3801	1.3801
47.5333	0.1762	0.0042	1.3893	1.3935
47.5667	0.1781	0	1.388	1.388
47.6	0.1798	0.0042	1.3867	1.3909
47.6333	0.1791	0	1.3854	1.3854
47.6667	0.1742	0.0042	1.3801	1.3843
47.7	0.1785	0	1.3788	1.3788
47.7333	0.1778	0.0042	1.3788	1.383
47.7667	0.1778	0.0042	1.3801	1.3843
47.8	0.1775	0.0042	1.384	1.3882
47.8333	0.1781	0.0042	1.3801	1.3843
47.8667	0.1808	0.0042	1.3761	1.3804
47.9	0.1775	0.0042	1.3801	1.3843
47.9333	0.1811	0.0042	1.3827	1.3869
47.9667	0.1791	0.0042	1.3854	1.3896
48	0.1808	0	1.384	1.384
48.0333	0.1791	0.0174	1.3788	1.3961
48.0667	0.1768	0.0174	1.3906	1.408
48.1	0.1752	0.0174	1.3893	1.4067
48.1333	0.1811	0.0042	1.3867	1.3909
48.1667	0.1775	0.0042	1.3854	1.3896
48.2	0.1778	0.0174	1.3854	1.4027
48.2333	0.1785	0	1.3827	1.3827
48.2667	0.1732	0.0042	1.3906	1.3948
48.3	0.1755	0.0174	1.3932	1.4106
48.3333	0.1758	0.0042	1.388	1.3922
48.3667	0.1791	0.0042	1.3893	1.3935
48.4	0.1778	0.0174	1.3919	1.4093
48.4333	0.1748	0.0042	1.3959	1.4001
48.4667	0.1771	0.0042	1.3946	1.3988
48.5	0.1755	0.0042	1.3906	1.3948
48.5333	0.1765	0.0174	1.3932	1.4106
48.5667	0.1768	0	1.3972	1.3972
48.6	0.1785	0.0042	1.3972	1.4014
48.6333	0.1808	0.0174	1.3972	1.4145
48.6667	0.1771	0.0042	1.3906	1.3948
48.7	0.1775	0.0174	1.3985	1.4159



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
48.7333	0.1768	0.0174	1.4011	1.4185
48.7667	0.1778	0	1.4011	1.4011
48.8	0.1755	0.0042	1.3972	1.4014
48.8333	0.1768	0.0042	1.3985	1.4027
48.8667	0.1778	0	1.3906	1.3906
48.9	0.1771	0.0042	1.3998	1.404
48.9333	0.1768	0.0305	1.3906	1.4211
48.9667	0.1768	0.0042	1.3932	1.3974
49	0.1765	0.0042	1.3959	1.4001
49.0333	0.1762	0.0042	1.3972	1.4014
49.0667	0.1785	0.0042	1.3932	1.3974
49.1	0.1771	0.0174	1.3893	1.4067
49.1333	0.1798	0.0042	1.4011	1.4053
49.1667	0.1752	0.0174	1.3946	1.4119
49.2	0.1775	0	1.3906	1.3906
49.2333	0.1771	0.0042	1.3946	1.3988
49.2667	0.1778	0.0042	1.3985	1.4027
49.3	0.1801	0.0042	1.3946	1.3988
49.3333	0.1788	0.0042	1.3972	1.4014
49.3667	0.1795	0.0042	1.3959	1.4001
49.4	0.1791	0	1.3972	1.3972
49.4333	0.1804	0	1.3985	1.3985
49.4667	0.1752	0.0174	1.3959	1.4132
49.5	0.1762	0.0174	1.3932	1.4106
49.5333	0.1775	0.0042	1.3932	1.3974
49.5667	0.1788	0	1.3946	1.3946
49.6	0.1762	0.0174	1.3946	1.4119
49.6333	0.1752	0	1.3959	1.3959
49.6667	0.1811	0	1.3893	1.3893
49.7	0.1768	0.0042	1.3893	1.3935
49.7333	0.1771	0.0174	1.3893	1.4067
49.7667	0.1778	0	1.3867	1.3867
49.8	0.1785	0.0174	1.388	1.4053
49.8333	0.1788	0.0174	1.388	1.4053
49.8667	0.1781	0.0042	1.3788	1.383
49.9	0.1781	0.0174	1.3827	1.4001
49.9333	0.1771	0.0174	1.3827	1.4001
49.9667	0.1795	0.0042	1.3814	1.3856
50	0.1788	0.0042	1.3788	1.383
50.0333	0.1781	0.0042	1.3814	1.3856
50.0667	0.1765	0.0042	1.3801	1.3843
50.1	0.1795	0.0042	1.3722	1.3764
50.1333	0.1778	0.0174	1.3775	1.3948



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
.,,				
50.1667	0.1781	0.0174	1.3696	1.3869
50.2	0.1808	0.0042	1.3669	1.3711
50.2333	0.1788	0	1.3683	1.3683
50.2667	0.1788	0.0042	1.3656	1.3698
50.3	0.1765	0.0042	1.363	1.3672
50.3333	0.1814	0.0042	1.363	1.3672
50.3667	0.1781	0.0305	1.363	1.3935
50.4	0.1785	0.0174	1.3643	1.3817
50.4333	0.1752	0.0042	1.3643	1.3685
50.4667	0.1755	0.0042	1.3643	1.3685
50.5	0.1801	0.0042	1.3604	1.3646
50.5333	0.1765	0.0042	1.3643	1.3685
50.5667	0.1745	0.0042	1.3643	1.3685
50.6	0.1762	0.0174	1.3617	1.379
50.6333	0.1778	0.0042	1.3656	1.3698
50.6667	0.1768	0.0305	1.3669	1.3974
50.7	0.1785	0	1.363	1.363
50.7333	0.1758	0.0174	1.3643	1.3817
50.7667	0.1771	0.0174	1.3604	1.3777
50.8	0.1768	0.0305	1.3722	1.4027
50.8333	0.1775	0.0042	1.3617	1.3659
50.8667	0.1771	0	1.3617	1.3617
50.9	0.1775	0	1.3656	1.3656
50.9333	0.1775	0.0042	1.3683	1.3725
50.9667	0.1765	0.0042	1.3722	1.3764
51	0.1752	0.0174	1.3735	1.3909
51.0333	0.1742	0.0174	1.3735	1.3909
51.0667	0.1752	0.0042 0.0174	1.3722	1.3764
51.1 51.1333	0.1745	0.0174	1.3696 1.3722	1.3869 1.3764
51.1555	0.1781 0.1778	0.0042	1.3696	1.4001
51.1007	0.1765	0.0303	1.3696	1.3869
51.2333	0.1765	0.0042	1.3683	1.3725
51.2667	0.1781	0.0042	1.3696	1.3738
51.3	0.1778	0.0042	1.3656	1.3698
51.3333	0.1762	0.0042	1.3683	1.3725
51.3667	0.1771	0.0042	1.3669	1.3711
51.4	0.1771	0.0042	1.363	1.363
51.4333	0.1808	0.0042	1.363	1.3672
51.4667	0.1768	0	1.3643	1.3643
51.5	0.1788	0.0042	1.3591	1.3633
51.5333	0.1745	0.0174	1.3656	1.383
51.5667	0.1795	0.0305	1.363	1.3935



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
51.6	0.1762	0.0305	1.3617	1.3922
51.6333	0.1768	0.0042	1.3643	1.3685
51.6667	0.1752	0.0042	1.3643	1.3685
51.7	0.1768	0.0042	1.3643	1.3685
51.7333	0.1808	0.0174	1.3656	1.383
51.7667	0.1798	0.0042	1.3656	1.3698
51.8	0.1801	0.0305	1.3696	1.4001
51.8333	0.1814	0.0042	1.3735	1.3777
51.8667	0.1775	0	1.3735	1.3735
51.9	0.1781	0.0042	1.3735	1.3777
51.9333	0.1781	0.0042	1.3696	1.3738
51.9667	0.1778	0.0042	1.363	1.3672
52	0.1778	0.0042	1.3643	1.3685
52.0333	0.1778	0.0174	1.3564	1.3738
52.0667	0.1795	0.0174	1.3551	1.3725
52.1	0.1778	0.0042	1.3604	1.3646
52.1333	0.1814	0.0042	1.3696	1.3738
52.1667	0.1801	0.0042	1.3643	1.3685
52.2	0.1811	0.0042	1.363	1.3672
52.2333	0.1778	0.0174	1.363	1.3804
52.2667	0.1785	0.0174	1.363	1.3804
52.3	0.1791	0	1.3643	1.3643
52.3333	0.1788	0.0042	1.363	1.3672
52.3667	0.1801	0.0042	1.3643	1.3685
52.4	0.1818	0.0042	1.3617	1.3659
52.4333	0.1781	0.0042	1.3722	1.3764
52.4667	0.1781	0.0174	1.3656	1.383
52.5	0.1824	0.0305	1.3709	1.4014
52.5333	0.1768	0.0042	1.3709	1.3751
52.5667	0.1781	0.0174	1.3696	1.3869
52.6	0.1798	0	1.3748	1.3748
52.6333	0.1791	0.0174	1.3722	1.3896
52.6667	0.1821	0.0305	1.3709	1.4014
52.7	0.1781	0.0042	1.3722	1.3764
52.7333	0.1811	0.0042	1.3696	1.3738
52.7667	0.1795	0.0042	1.3788	1.383
52.8	0.1771	0.0042	1.3814	1.3856
52.8333	0.1811	0.0042	1.3775	1.3817
52.8667	0.1801	0.0174	1.3761	1.3935
52.9	0.1788	0.0042	1.3788	1.383
52.9333	0.1818	0.0174	1.3788	1.3961
52.9667	0.1821	0.0174	1.3801	1.3974
53	0.1814	0.0174	1.384	1.4014



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
53.0333	0.1788	0.0042	1.3814	1.3856
53.0667	0.1821	0.0042	1.3827	1.3869
53.1	0.1834	0.0042	1.3854	1.3896
53.1333	0.1814	0.0042	1.388	1.3922
53.1667	0.1827	0.0174	1.3893	1.4067
53.2	0.1804	0	1.3854	1.3854
53.2333	0.1844	0.0042	1.3906	1.3948
53.2667	0.1831	0.0042	1.3867	1.3909
53.3	0.1818	0	1.3946	1.3946
53.3333	0.1821	0.0042	1.3959	1.4001
53.3667	0.1827	0.0174	1.3985	1.4159
53.4	0.1814	0.0174	1.3959	1.4132
53.4333	0.1824	0.0042	1.3932	1.3974
53.4667	0.1837	0.0174	1.3972	1.4145
53.5	0.1844	0.0042	1.4011	1.4053
53.5333	0.1827	0.0042	1.4024	1.4067
53.5667	0.1824	0.0174	1.4024	1.4198
53.6	0.1847	0.0174	1.3946	1.4119
53.6333	0.1844	0.0042	1.4024	1.4067
53.6667	0.1854	0.0042	1.4051	1.4093
53.7	0.1854	0.0305	1.3985	1.429
53.7333	0.1827	0.0174	1.3985	1.4159
53.7667	0.1844	0.0174	1.3972	1.4145
53.8	0.1844	0.0042	1.3985	1.4027
53.8333	0.1864	0	1.3998	1.3998
53.8667	0.1827	0.0174	1.4011	1.4185
53.9	0.185	0.0174	1.4024	1.4198
53.9333	0.1844	0.0042	1.4064	1.4106
53.9667	0.1841	0.0042	1.4024	1.4067
54	0.1844	0.0042	1.4011	1.4053
54.0333	0.185	0.0042	1.4051	1.4093
54.0667	0.1854	0.0042	1.4038	1.408
54.1	0.1831	0.0042	1.4038	1.408
54.1333	0.1831	0.0042	1.4011	1.4053
54.1667	0.1857	0.0174	1.4038	1.4211
54.2	0.1827	0.0042	1.4024	1.4067
54.2333	0.1831	0.0174	1.4064	1.4237
54.2667	0.1827	0.0174	1.4024	1.4198
54.3	0.1824	0.0042	1.409	1.4132
54.3333	0.186	0.0042	1.4064	1.4106
54.3667	0.1864	0.0042	1.3998	1.404
54.4	0.1831	0.0042	1.409	1.4132
54.4333	0.1883	0.0174	1.4064	1.4237



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
54.4667	0.1821	0.0042	1.4064	1.4106
54.4667	0.1821	0.0042	1.4064	1.4106
54.5333	0.1867	0.0042	1.4077	1.4237
54.5667	0.1887	0.0042	1.4077	1.4119
54.5667	0.1844	0.0174	1.4064	1.4251
54.6333	0.1854	0.0042	1.4051	1.4251
54.6667	0.1857	0.0042	1.4117	1.4093
54.7	0.1867	0.0174	1.4117	1.4117
54.7333	0.1827	0.0042	1.4117	1.4159
54.7667	0.1857	0.0042	1.4117	1.4139
54.7667	0.1854	0.0042	1.4077	1.4024
54.8333	0.1834	0.0305	1.4103	1.44119
54.8667	0.185	0.0303	1.4103	1.4408
54.8667	0.1877	0.0305	1.4117	1.4132
54.9333	0.1877	0.0303	1.4117	1.4422
54.9667	0.1831	0.0174	1.4103	1.4277
55	0.1811	0.0174	1.4077	1.4277
55.0333	0.1811	0.0042	1.4103	1.4231
55.0667	0.1847	0.0042	1.4103	1.4143
55.1	0.1844	0.0042	1.4051	1.4132
55.1333	0.1854	0.0042	1.4064	1.4106
55.1667	0.1857	0.0042	1.4051	1.4108
55.2	0.1854	0.0042	1.409	1.4132
55.2333	0.1834	0.0042	1.4064	1.4106
55.2667	0.1857	0.0042	1.4064	1.4106
55.3	0.185	0.0042	1.4077	1.4119
55.3333	0.1841	0.0174	1.4143	1.4316
55.3667	0.1841	0.0174	1.4143	1.4316
55.4	0.1867	0.0042	1.4117	1.4145
55.4333	0.1831	0.0042	1.4117	1.4159
55.4667	0.1854	0.0174	1.4117	1.4303
55.5	0.186	0.0174	1.409	1.4264
55.5333	0.1814	0.0174	1.4051	1.4051
55.5667	0.1814	0.0042	1.4011	1.4051
55.6	0.1844	0.0174	1.4051	1.4224
55.6333	0.185	0.0174	1.4077	1.4224
55.6667	0.1837	0	1.409	1.4077
55.7	0.1857	0.0042	1.4051	1.4093
55.7333	0.1837	0.0042	1.4064	1.4106
55.7667	0.1867	0.0042	1.4011	1.4053
55.8	0.1834	0.0305	1.4011	1.433
55.8333	0.1874	0.0303	1.4011	1.4011
55.8667	0.1854	0	1.4011	1.4011
33.0007	J.1057	U	1.4000	1.4000



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
55.9	0.185	0.0174	1.4024	1.4198
55.9333	0.1857	0.0042	1.4011	1.4053
55.9667	0.188	0.0042	1.3985	1.4027
56	0.187	0.0174	1.4064	1.4237
56.0333	0.186	0.0042	1.4064	1.4106
56.0667	0.1841	0	1.4117	1.4117
56.1	0.1864	0	1.4051	1.4051
56.1333	0.1841	0.0174	1.409	1.4264
56.1667	0.185	0.0042	1.4077	1.4119
56.2	0.1844	0	1.4156	1.4156
56.2333	0.1841	0.0174	1.4038	1.4211
56.2667	0.1854	0.0174	1.409	1.4264
56.3	0.186	0.0174	1.409	1.4264
56.3333	0.1824	0.0042	1.4077	1.4119
56.3667	0.1841	0.0174	1.4051	1.4224
56.4	0.187	0.0174	1.4077	1.4251
56.4333	0.1834	0.0174	1.4077	1.4251
56.4667	0.1837	0.0174	1.4064	1.4237
56.5	0.187	0.0042	1.4064	1.4106
56.5333	0.1834	0.0042	1.4051	1.4093
56.5667	0.1824	0.0042	1.4024	1.4067
56.6	0.1837	0.0174	1.4051	1.4224
56.6333	0.1827	0.0174	1.4064	1.4237
56.6667	0.1837	0.0042	1.4064	1.4106
56.7	0.185	0	1.4011	1.4011
56.7333	0.1844	0.0174	1.4011	1.4185
56.7667	0.1837	0	1.4038	1.4038
56.8	0.1808	0.0042	1.4011	1.4053
56.8333	0.1831	0.0174	1.409	1.4264
56.8667	0.1841	0.0174	1.4117	1.429
56.9	0.1818	0.0042	1.4064	1.4106
56.9333	0.1844	0	1.409	1.409
56.9667	0.1821	0.0042	1.4064	1.4106
57	0.1808	0.0305	1.4051	1.4356
57.0333	0.1841	0.0042	1.4064	1.4106
57.0667	0.1831	0.0042	1.4038	1.408
57.1	0.1857	0.0174	1.4024	1.4198
57.1333	0.1827	0.0305	1.4051	1.4356
57.1667	0.1818	0.0174	1.4038	1.4211
57.2	0.1821	0.0042	1.4064	1.4106
57.2333	0.1818	0.0042	1.4024	1.4067
57.2667	0.1827	0.0042	1.4024	1.4067
57.3	0.1834	0	1.4064	1.4064



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
(111111)	(psi)	(LPIVI)	(LFIVI)	(LPIVI)
57.3333	0.1808	0.0042	1.4038	1.408
57.3667	0.1811	0.0042	1.3998	1.404
57.4	0.1824	0	1.4024	1.4024
57.4333	0.1847	0.0042	1.4051	1.4093
57.4667	0.1831	0	1.4011	1.4011
57.5	0.1795	0.0174	1.3998	1.4172
57.5333	0.1791	0.0174	1.4051	1.4224
57.5667	0.1837	0.0042	1.4011	1.4053
57.6	0.1818	0.0042	1.4024	1.4067
57.6333	0.1824	0.0174	1.4011	1.4185
57.6667	0.1834	0.0305	1.4064	1.4369
57.7	0.1801	0.0174	1.4011	1.4185
57.7333	0.1837	0.0042	1.4077	1.4119
57.7667	0.1818	0.0174	1.409	1.4264
57.8	0.1834	0.0042	1.4038	1.408
57.8333	0.1821	0.0042	1.3998	1.404
57.8667	0.1841	0	1.3972	1.3972
57.9	0.1811	0.0174	1.3998	1.4172
57.9333	0.1821	0.0042	1.4051	1.4093
57.9667	0.1818	0.0042	1.4011	1.4053
58	0.1814	0.0174	1.3972	1.4145
58.0333	0.1844	0.0042	1.4011	1.4053
58.0667	0.1814	0.0042	1.4011	1.4053
58.1	0.1811	0.0174	1.3985	1.4159
58.1333	0.1801	0.0174	1.3998	1.4172
58.1667	0.1791	0.0174	1.3932	1.4106
58.2	0.1808	0.0174	1.3946	1.4119
58.2333	0.1801	0.0042	1.3906	1.3948
58.2667	0.1811	0.0305	1.3867	1.4172
58.3	0.1827	0.0174	1.3959	1.4132
58.3333	0.1834	0.0042	1.3906	1.3948
58.3667	0.1814	0	1.3893	1.3893
58.4	0.1808	0.0042	1.384	1.3882
58.4333	0.1795	0.0305	1.3814	1.4119
58.4667	0.1818	0	1.3801	1.3801
58.5	0.1795	0.0174	1.3827	1.4001
58.5333	0.1814	0.0174	1.384	1.4014
58.5667	0.1818	0.0174	1.3801	1.3974
58.6	0.1801	0.0042	1.3827	1.3869
58.6333	0.1821	0 0043	1.3775	1.3775
58.6667	0.1788	0.0042	1.3748	1.379
58.7 58.7333	0.1785 0.1781	0.0042	1.3788 1.3761	1.383 1.3804
56./333	0.1/81	0.0042	1.3/61	1.3804



Project No. G101276459SAT-019

Time	Ch 1 dP		Ch 3 Low Flow	
(min)	(psi)	(LPM)	(LPM)	(LPM)
58.7667	0.1811	0.0174	1.3775	1.3948
58.8	0.1791	0.0305	1.3801	1.4106
58.8333	0.1818	0.0042	1.3827	1.3869
58.8667	0.1798	0.0174	1.3814	1.3988
58.9	0.1775	0.0042	1.3814	1.3856
58.9333	0.1804	0.0042	1.3748	1.379
58.9667	0.1788	0.0305	1.384	1.4145
59	0.1814	0.0042	1.3854	1.3896
59.0333	0.1837	0.0042	1.3906	1.3948
59.0667	0.1811	0.0042	1.3932	1.3974
59.1	0.1818	0.0042	1.3919	1.3961
59.1333	0.1831	0.0042	1.3827	1.3869
59.1667	0.1775	0.0174	1.3801	1.3974
59.2	0.1821	0.0042	1.384	1.3882
59.2333	0.1801	0.0042	1.3827	1.3869
59.2667	0.1821	0.0042	1.3867	1.3909
59.3	0.1818	0	1.3827	1.3827
59.3333	0.1827	0	1.388	1.388
59.3667	0.1798	0.0042	1.3867	1.3909
59.4	0.1778	0.0174	1.388	1.4053
59.4333	0.1765	0.0042	1.3801	1.3843
59.4667	0.1795	0.0174	1.3801	1.3974
59.5	0.1814	0.0305	1.3814	1.4119
59.5333	0.1781	0.0174	1.3827	1.4001
59.5667	0.1801	0.0042	1.3893	1.3935
59.6	0.1785	0.0174	1.3854	1.4027
59.6333	0.1765	0.0042	1.3788	1.383
59.6667	0.1775	0.0174	1.388	1.4053
59.7	0.1811	0.0174	1.3867	1.404
59.7333	0.1818	0.0174	1.3814	1.3988
59.7667	0.1811	0.0174	1.384	1.4014
59.8	0.1771	0.0174	1.3801	1.3974
59.8333	0.1778	0.0174	1.388	1.4053
59.8667	0.1801	0.0174	1.384	1.4014
59.9	0.1775	0.0174	1.3854	1.4027
59.9333	0.1785	0.0305	1.3854	1.4159
59.9667	0.1765	0	1.3867	1.3867
60	0.1758	0	1.3854	1.3854
60.0333	0.1775	0.0042	1.3801	1.3843
60.0667	0.1804	0.0042	1.384	1.3882
60.1	0.1778	0.0042	1.3761	1.3804
60.1333	0.1765	0.0174	1.3775	1.3948
60.1667	0.1785	0.0042	1.3775	1.3817



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
60.2	0.1788	0.0305	1.3801	1.4106
60.2333	0.1801	0.0174	1.3761	1.3935
60.2667	0.1795	0.0174	1.3748	1.3922
60.3	0.1781	0.0174	1.3748	1.3922
60.3333	0.1768	0.0042	1.3775	1.3817
60.3667	0.1791	0.0042	1.3775	1.3817
60.4	0.1801	0.0174	1.3814	1.3988
60.4333	0.1788	0.0174	1.3722	1.3896
60.4667	0.1798	0.0174	1.3854	1.4027
60.5	0.1778	0.0042	1.3827	1.3869
60.5333	0.1755	0.0174	1.3722	1.3896
60.5667	0.1762	0.0174	1.3683	1.3856
60.6	0.1762	0.0042	1.3696	1.3738
60.6333	0.1801	0.0174	1.3801	1.3974
60.6667	0.1785	0.0042	1.3801	1.3843
60.7	0.1775	0.0042	1.3801	1.3843
60.7333	0.1785	0.0174	1.3827	1.4001
60.7667	0.1821	0	1.3748	1.3748
60.8	0.1768	0.0042	1.3735	1.3777
60.8333	0.1755	0.0174	1.3748	1.3922
60.8667	0.1781	0.0042	1.3709	1.3751
60.9	0.1791	0.0042	1.3735	1.3777
60.9333	0.1768	0.0042	1.3735	1.3777
60.9667	0.1811	0	1.3735	1.3735
61	0.1781	0.0042	1.3735	1.3777
61.0333	0.1781	0.0305	1.3761	1.4067
61.0667	0.1768	0.0305	1.3722	1.4027
61.1	0.1795	0.0042	1.3735	1.3777
61.1333	0.1788	0.0042	1.3748	1.379
61.1667	0.1742	0.0042	1.3722	1.3764
61.2	0.1768	0.0042	1.3722	1.3764
61.2333	0.1785	0.0042	1.3748	1.379
61.2667	0.1781	0.0042	1.3748	1.379
61.3	0.1765	0.0042	1.3709	1.3751
61.3333	0.1795	0.0305	1.3683	1.3988
61.3667	0.1798	0.0305	1.3696	1.4001
61.4	0.1752	0.0042	1.3735	1.3777
61.4333	0.1762	0.0174	1.3735	1.3909
61.4667	0.1795	0.0174	1.3722	1.3896
61.5	0.1795	0.0174	1.3775	1.3948
61.5333	0.1788	0.0042	1.3748	1.379
61.5667	0.1752	0.0174	1.3722	1.3896
61.6	0.1755	0.0042	1.3748	1.379



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
61.6333	0.1755	0.0042	1.3735	1.3777
61.6667	0.1775	0.0042	1.3761	1.3804
61.7	0.1768	0.0174	1.3761	1.3935
61.7333	0.1765	0.0042	1.3775	1.3817
61.7667	0.1765	0.0174	1.3801	1.3974
61.8	0.1798	0.0042	1.3775	1.3817
61.8333	0.1755	0.0042	1.3748	1.379
61.8667	0.1768	0.0042	1.3722	1.3764
61.9	0.1748	0.0042	1.3801	1.3843
61.9333	0.1762	0	1.3761	1.3761
61.9667	0.1778	0.0042	1.3775	1.3817
62	0.1771	0.0174	1.3814	1.3988
62.0333	0.1752	0.0174	1.3801	1.3974
62.0667	0.1788	0.0042	1.3814	1.3856
62.1	0.1762	0.0174	1.3775	1.3948
62.1333	0.1739	0.0174	1.3748	1.3922
62.1667	0.1785	0.0042	1.3801	1.3843
62.2	0.1771	0.0042	1.3761	1.3804
62.2333	0.1768	0.0174	1.3735	1.3909
62.2667	0.1771	0.0305	1.3722	1.4027
62.3	0.1788	0.0042	1.3735	1.3777
62.3333	0.1745	0.0042	1.3669	1.3711
62.3667	0.1775	0.0174	1.3696	1.3869
62.4	0.1768	0.0174	1.3617	1.379
62.4333	0.1781	0.0042	1.3643	1.3685
62.4667	0.1755	0.0042	1.363	1.3672
62.5	0.1788	0.0174	1.3709	1.3882
62.5333	0.1752	0.0174	1.3669	1.3843
62.5667	0.1752	0.0174	1.3709	1.3882
62.6	0.1765	0.0042	1.3722	1.3764
62.6333	0.1778	0.0174	1.3748	1.3922
62.6667	0.1755	0.0174	1.3748	1.3922
62.7	0.1778	0.0042	1.3775	1.3817
62.7333	0.1771	0.0174	1.3801	1.3974
62.7667	0.1788	0.0042	1.3854	1.3896
62.8	0.1755	0.0174	1.388	1.4053
62.8333	0.1755	0.0042	1.3827	1.3869
62.8667	0.1765	0.0174	1.3867	1.404
62.9	0.1778	0.0042	1.3906	1.3948
62.9333	0.1768	0	1.3867	1.3867
62.9667	0.1765	0.0174	1.3854	1.4027
63	0.1762	0.0174	1.3827	1.4001
63.0333	0.1742	0.0174	1.3801	1.3974



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
co occ=	0.4770		4 2700	4 2700
63.0667	0.1778	0	1.3788	1.3788
63.1	0.1775	0.0042	1.3801	1.3843
63.1333	0.1758	0.0042	1.3788	1.383
63.1667	0.1742	0.0042	1.3722	1.3764
63.2	0.1742	0.0305	1.3722	1.4027
63.2333	0.1768	0	1.3709	1.3709
63.2667	0.1771	0.0174	1.3669	1.3843
63.3	0.1755	0.0174	1.3604	1.3777
63.3333	0.1768	0.0174	1.3683	1.3856
63.3667	0.1768	0.0042	1.3643	1.3685
63.4	0.1791	0.0042	1.3709	1.3751
63.4333	0.1739	0.0174	1.3696	1.3869
63.4667	0.1752	0.0042	1.3669	1.3711
63.5	0.1775	0	1.3709	1.3709
63.5333	0.1771	0.0042	1.3722	1.3764
63.5667	0.1781	0.0174	1.3722	1.3896
63.6	0.1765	0.0174	1.3748	1.3922
63.6333	0.1752	0	1.3814	1.3814
63.6667	0.1748	0.0174	1.3801	1.3974
63.7	0.1781	0.0042	1.3775	1.3817
63.7333	0.1775	0.0042	1.3814	1.3856
63.7667	0.1745	0.0042 0.0174	1.3761	1.3804
63.8	0.1762		1.3735	1.3909
63.8333 63.8667	0.1725	0.0042	1.3761 1.3696	1.3804
63.8667	0.1762 0.1765	0.0174	1.3683	1.3869 1.3725
63.9333	0.1765	0.0042	1.3643	1.3643
63.9667		0.0174	1.3643	1.3643
64	0.1755 0.1739	0.0174	1.3617	1.3804
64.0333	0.1739	0.0174	1.3577	1.3751
64.0667	0.1773	0.0174	1.3577	1.3731
64.1	0.1739	0.0174	1.3564	1.3606
64.1333	0.1781	0.0042	1.3485	1.3527
64.1667	0.1775	0.0042	1.3538	1.3527
64.2	0.1775	0.0042	1.3433	1.3475
64.2333	0.1733	0.0042	1.3446	1.34/3
64.2667	0.1778	0.0042	1.3433	1.3400
64.3	0.1725	0.0174	1.3472	1.3646
64.3333	0.1725	0.0174	1.3472	1.3646
64.3667	0.1752	0.0174	1.3538	1.3711
64.4	0.1732	0.0174	1.3472	1.3646
64.4333	0.1739	0.0174	1.3472	1.3646
64.4667	0.1775	0.0174	1.3446	1.3619
04.400/	0.1/33	0.0174	1.5440	1.3019



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
64.5	0.1745	0.0042	1.3485	1.3527
64.5333	0.1768	0.0305	1.3472	1.3777
64.5667	0.1752	0.0174	1.3446	1.3619
64.6	0.1775	0.0042	1.3446	1.3488
64.6333	0.1739	0.0174	1.3459	1.3633
64.6667	0.1742	0	1.3446	1.3446
64.7	0.1742	0.0042	1.3433	1.3475
64.7333	0.1722	0.0174	1.3485	1.3659
64.7667	0.1735	0.0174	1.3498	1.3672
64.8	0.1758	0.0042	1.3459	1.3501
64.8333	0.1712	0	1.3472	1.3472
64.8667	0.1745	0.0042	1.3512	1.3554
64.9	0.1755	0.0042	1.3485	1.3527
64.9333	0.1745	0	1.3485	1.3485
64.9667	0.1725	0.0174	1.3472	1.3646
65	0.1762	0.0174	1.3512	1.3685
65.0333	0.1732	0.0042	1.3498	1.3541
65.0667	0.1745	0.0174	1.3512	1.3685
65.1	0.1752	0.0305	1.3485	1.379
65.1333	0.1739	0.0042	1.3485	1.3527
65.1667	0.1739	0.0174	1.3512	1.3685
65.2	0.1755	0.0042	1.3485	1.3527
65.2333	0.1762	0	1.3512	1.3512
65.2667	0.1725	0.0042	1.3485	1.3527
65.3	0.1722	0.0174	1.3525	1.3698
65.3333	0.1762	0.0042	1.3525	1.3567
65.3667	0.1762	0.0174	1.3485	1.3659
65.4	0.1739	0.0174	1.3485	1.3659
65.4333	0.1748	0	1.3512	1.3512
65.4667	0.1722	0.0042	1.3485	1.3527
65.5	0.1748	0.0042	1.3538	1.358
65.5333	0.1742	0.0174	1.3498	1.3672
65.5667	0.1768	0.0174	1.3525	1.3698
65.6	0.1745	0.0042	1.3512	1.3554
65.6333	0.1742	0.0042	1.3512	1.3554
65.6667	0.1775	0.0042	1.3538	1.358
65.7	0.1758	0.0042	1.3512	1.3554
65.7333	0.1748	0	1.3577	1.3577
65.7667	0.1739	0	1.3538	1.3538
65.8	0.1732	0.0174	1.3564	1.3738
65.8333	0.1732	0.0042	1.3459	1.3501
65.8667	0.1732	0.0042	1.3485	1.3527
65.9	0.1722	0.0042	1.3498	1.3541



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
c= 0000	0.4740	22474	4 2450	4 2622
65.9333	0.1742	0.0174	1.3459	1.3633
65.9667	0.1729	0.0042	1.3472	1.3514
66	0.1729	0.0042	1.3433	1.3475
66.0333	0.1735	0.0042	1.3406	1.3448
66.0667	0.1735	0.0042	1.342	1.3462
66.1	0.1732	0.0042	1.3393	1.3435
66.1333	0.1725	0.0174	1.338	1.3554
66.1667	0.1739	0.0174	1.3446	1.3619
66.2	0.1762	0.0174	1.3472	1.3646
66.2333	0.1742	0.0174	1.3433	1.3606
66.2667	0.1742	0.0174	1.342	1.3593
66.3	0.1765	0.0042	1.3406	1.3448
66.3333	0.1739	0.0174	1.342	1.3593
66.3667	0.1742	0.0042	1.3393	1.3435
66.4	0.1752	0.0174	1.3393	1.3567
66.4333	0.1752	0.0042	1.3393	1.3435
66.4667	0.1742	0.0174	1.338	1.3554
66.5	0.1752	0.0042	1.3433	1.3475
66.5333	0.1732	0.0174	1.3446	1.3619
66.5667	0.1745	0.0305	1.3433	1.3738
66.6	0.1745	0.0042	1.338	1.3422
66.6333	0.1771	0.0042	1.3406	1.3448
66.6667	0.1745	0.0305	1.3328	1.3633
66.7	0.1735	0.0042	1.3406	1.3448
66.7333	0.1745	0.0042	1.338	1.3422
66.7667	0.1735	0.0042	1.342	1.3462
66.8	0.1722	0.0174	1.3406	1.358
66.8333	0.1729	0.0174	1.3393	1.3567
66.8667	0.1732	0.0174	1.3341	1.3514
66.9	0.1742	0.0174	1.3354	1.3527
66.9333	0.1729	0.0042	1.338	1.3422
66.9667	0.1732	0.0174	1.3354	1.3527
67	0.1729	0.0042	1.3354	1.3396
67.0333	0.1725	0.0174	1.3328	1.3501
67.0667	0.1719	0.0042	1.3328	1.337
67.1	0.1732	0	1.3288	1.3288
67.1333	0.1722	0.0174	1.3328	1.3501
67.1667	0.1702	0.0042	1.3288	1.333
67.2	0.1716	0.0305	1.3314	1.3619
67.2333	0.1712	0.0174	1.3262	1.3435
67.2667	0.1722	0.0042	1.3288	1.333
67.3	0.1719	0.0042	1.3262	1.3304
67.3333	0.1748	0.0174	1.3288	1.3462



Project No. G101276459SAT-019

Time	Ch 1 dP	-	Ch 3 Low Flow	
(min)	(psi)	(LPM)	(LPM)	(LPM)
67.3667	0.1716	0.0174	1.3235	1.3409
67.4	0.1710	0.0174	1.3249	1.3422
67.4333	0.1739	0.0174	1.3288	1.3462
67.4667	0.1719	0.0042	1.3249	1.3291
67.5	0.1715	0.0174	1.3249	1.3422
67.5333	0.1712	0.0042	1.3249	1.3291
67.5667	0.1712	0.0042	1.317	1.3212
67.6	0.1725	0.0042	1.3157	1.3157
67.6333	0.1716	0.0042	1.3196	1.3238
67.6667	0.1702	0.0042	1.3262	1.3304
67.7	0.1712	0.0174	1.3157	1.333
67.7333	0.1709	0.0042	1.3143	1.3185
67.7667	0.1725	0.0042	1.3183	1.3225
67.8	0.1699	0.0174	1.317	1.3343
67.8333	0.1716	0.0305	1.3183	1.3488
67.8667	0.1755	0.0174	1.317	1.3343
67.9	0.1775	0.0174	1.3196	1.337
67.9333	0.1742	0.0174	1.3183	1.3356
67.9667	0.1811	0	1.3209	1.3209
68	0.188	0.0042	1.3183	1.3225
68.0333	0.1985	0.0042	1.3262	1.3304
68.0667	0.2143	0.0042	1.3222	1.3264
68.1	0.2265	0.0042	1.3288	1.333
68.1333	0.242	0.0174	1.3354	1.3527
68.1667	0.2542	0.0174	1.3433	1.3606
68.2	0.2703	0.0174	1.3538	1.3711
68.2333	0.2812	0.0042	1.3722	1.3764
68.2667	0.2924	0.0305	1.3867	1.4172
68.3	0.3082	0.0042	1.3972	1.4014
68.3333	0.3207	0.0174	1.4117	1.429
68.3667	0.3355	0.0174	1.4301	1.4474
68.4	0.3463	0	1.4485	1.4485
68.4333	0.3542	0.0174	1.4629	1.4803
68.4667	0.3605	0.0042	1.484	1.4882
68.5	0.3618	0.0042	1.5063	1.5105
68.5333	0.3704	0.0042	1.5234	1.5276
68.5667	0.3714	0.0174	1.5379	1.5552
68.6	0.3687	0.0042	1.5576	1.5618
68.6333	0.3691	0.0437	1.5773	1.621
68.6667	0.372	0.0042	1.5944	1.5986
68.7	0.371	0.0042	1.6063	1.6105
68.7333	0.3691	0.0042	1.622	1.6263
68.7667	0.3694	0.0174	1.6365	1.6539



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
68.8	0.3687	0.0174	1.6497	1.667
68.8333	0.3641	0.0174	1.6654	1.6828
68.8667	0.3625	0.0042	1.6786	1.6828
68.9	0.3595	0.0042	1.6852	1.6894
68.9333	0.3575	0.0042	1.7009	1.7052
68.9667	0.3618	0.0042	1.7167	1.7209
69	0.3612	0.0042	1.7194	1.7236
69.0333	0.3631	0.0042	1.7299	1.7341
69.0667	0.3687	0.0042	1.7391	1.7433
69.1	0.3691	0.0174	1.7483	1.7656
69.1333	0.3648	0	1.7601	1.7601
69.1667	0.3658	0.0174	1.7693	1.7867
69.2	0.3648	0.0042	1.7785	1.7827
69.2333	0.3648	0.0042	1.7864	1.7906
69.2667	0.3687	0.0174	1.7969	1.8143
69.3	0.3697	0.0042	1.8035	1.8077
69.3333	0.3592	0.0174	1.8075	1.8248
69.3667	0.3552	0.0042	1.818	1.8222
69.4	0.3549	0.0042	1.8272	1.8314
69.4333	0.3569	0.0042	1.839	1.8432
69.4667	0.3549	0.0174	1.843	1.8603
69.5	0.3546	0.0174	1.8574	1.8748
69.5333	0.3569	0.0042	1.8627	1.8669
69.5667	0.3533	0.0174	1.8706	1.8879
69.6	0.3513	0.0174	1.8719	1.8892
69.6333	0.3542	0.0042	1.8772	1.8814
69.6667	0.3506	0.0437	1.8824	1.9261
69.7	0.3509	0.0042	1.8903	1.8945
69.7333	0.3513	0.0305	1.8903	1.9208
69.7667	0.3506	0.0042	1.8982	1.9024
69.8	0.349	0.0042	1.8995	1.9037
69.8333	0.35	0	1.8982	1.8982
69.8667	0.35	0.0042	1.91	1.9142
69.9	0.3506	0.0174	1.9179	1.9353
69.9333	0.3519	0.0174	1.9271	1.9445
69.9667	0.3496	0.0174	1.9297	1.9471
70	0.3473	0.0042	1.9403	1.9445
70.0333	0.3506	0.0174	1.9508	1.9681
70.0667	0.348	0.0042	1.9547	1.9589
70.1	0.3483	0.0042	1.9587	1.9629
70.1333	0.3473	0.0042	1.96	1.9642
70.1667	0.3467	0.0174	1.9653	1.9826
70.2	0.3496	0.0174	1.9679	1.9852



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
70.2333	0.3496	0.0174	1.9626	1.98
70.2667	0.3477	0.0042	1.9587	1.9629
70.3	0.348	0	1.9745	1.9745
70.3333	0.3463	0.0042	1.9705	1.9747
70.3667	0.349	0.0174	1.9718	1.9892
70.4	0.3473	0.0174	1.9797	1.9971
70.4333	0.3463	0.0174	1.9837	2.001
70.4667	0.3496	0.0042	1.9889	1.9931
70.5	0.348	0.0042	2.0008	2.005
70.5333	0.3509	0.0042	2.0021	2.0063
70.5667	0.3503	0.0305	2.0086	2.0392
70.6	0.35	0.0174	2.0086	2.026
70.6333	0.3519	0.0042	2.0113	2.0155
70.6667	0.35	0.0042	2.0139	2.0181
70.7	0.349	0.0042	2.0152	2.0194
70.7333	0.3483	0.0042	2.0179	2.0221
70.7667	0.349	0.0174	2.0218	2.0392
70.8	0.3516	0.0174	2.0244	2.0418
70.8333	0.3513	0.0042	2.0218	2.026
70.8667	0.3519	0.0042	2.0192	2.0234
70.9	0.3496	0.0305	2.0297	2.0602
70.9333	0.3513	0.0042	2.0376	2.0418
70.9667	0.3519	0.0174	2.0349	2.0523
71	0.3523	0.0174	2.0402	2.0576
71.0333	0.3519	0.0042	2.0481	2.0523
71.0667	0.3562	0.0042	2.052	2.0563
71.1	0.3539	0.0174	2.0494	2.0668
71.1333	0.3588	0.0042	2.052	2.0563
71.1667	0.3562	0.0042	2.0481	2.0523
71.2	0.3592	0	2.0599	2.0599
71.2333	0.3575	0.0305	2.0586	2.0891
71.2667	0.3595	0.0305	2.0586	2.0891
71.3	0.3638	0.0174	2.0652	2.0825
71.3333	0.3625	0.0042	2.077	2.0812
71.3667	0.3608	0.0174	2.0797	2.097
71.4	0.3621	0.0174	2.0783	2.0957
71.4333	0.3667	0.0042	2.0849	2.0891
71.4667	0.3661	0.0174	2.0889	2.1062
71.5	0.3648	0.0042	2.0968	2.101
71.5333	0.3681	0.0174	2.1033	2.1207
71.5667	0.3714	0.0174	2.1086	2.1259
71.6	0.373	0.0042	2.106	2.1102
71.6333	0.3677	0.0174	2.1073	2.1246



Project No. G101276459SAT-019

Time	Ch 1 dP		Ch 3 Low Flow	
(min)	(psi)	(LPM)	(LPM)	(LPM)
71.6667	0.3697	0	2.1152	2.1152
71.0007	0.3697	0.0042	2.1125	2.1152
71.7333	0.3684	0.0174	2.1204	2.1378
71.7667	0.37	0.0042	2.1178	2.122
71.7	0.3694	0.0042	2.1231	2.1273
71.8333	0.3694	0.0042	2.1283	2.1325
71.8667	0.3704	0.0305	2.1362	2.1667
71.9	0.372	0.0174	2.1401	2.1575
71.9333	0.375	0.0174	2.1494	2.1667
71.9667	0.3753	0.0042	2.1507	2.1549
71.5007	0.374	0.0042	2.1572	2.1614
72.0333	0.3707	0.0174	2.1559	2.1733
72.0667	0.3608	0.0174	2.1678	2.1851
72.1	0.3641	0.0305	2.1691	2.1996
72.1333	0.3648	0.0174	2.1691	2.1864
72.1667	0.3651	0.0174	2.1743	2.1917
72.2	0.3658	0.0174	2.1756	2.193
72.2333	0.3651	0.0174	2.177	2.1943
72.2667	0.3644	0.0042	2.177	2.1812
72.3	0.3661	0.0042	2.1849	2.1891
72.3333	0.3687	0.0042	2.1849	2.1891
72.3667	0.3674	0.0042	2.1888	2.193
72.4	0.3687	0.0174	2.1862	2.2035
72.4333	0.3677	0.0174	2.1927	2.2101
72.4667	0.3691	0.0042	2.1993	2.2035
72.5	0.3714	0.0305	2.1954	2.2259
72.5333	0.3707	0.0174	2.198	2.2154
72.5667	0.372	0.0174	2.198	2.2154
72.6	0.371	0	2.1967	2.1967
72.6333	0.3691	0.0174	2.2019	2.2193
72.6667	0.3727	0.0174	2.2019	2.2193
72.7	0.3714	0.0042	2.2125	2.2167
72.7333	0.3733	0.0174	2.2098	2.2272
72.7667	0.3733	0.0174	2.2138	2.2311
72.8	0.3737	0.0042	2.2164	2.2206
72.8333	0.3638	0.0174	2.219	2.2364
72.8667	0.3582	0.0042	2.2204	2.2246
72.9	0.3615	0.0042	2.219	2.2233
72.9333	0.3618	0.0042	2.2217	2.2259
72.9667	0.3618	0.0174	2.2243	2.2417
73	0.3618	0	2.2256	2.2256
73.0333	0.3615	0.0305	2.2282	2.2588
73.0667	0.3635	0.0042	2.2348	2.239



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
,				
73.1	0.3661	0.0042	2.2269	2.2311
73.1333	0.3631	0.0174	2.2335	2.2509
73.1667	0.3631	0.0174	2.2296	2.2469
73.2	0.3654	0.0042	2.2388	2.243
73.2333	0.3677	0.0042	2.2375	2.2417
73.2667	0.3664	0.0042	2.2388	2.243
73.3	0.3654	0.0042	2.2414	2.2456
73.3333	0.3681	0.0042	2.244	2.2482
73.3667	0.3658	0.0042	2.2427	2.2469
73.4	0.3674	0.0174	2.2519	2.2693
73.4333	0.3664	0.0174	2.248	2.2653
73.4667	0.3667	0.0042	2.2427	2.2469
73.5	0.3661	0.0174	2.2545	2.2719
73.5333	0.3664	0.0042	2.2453	2.2496
73.5667	0.3694	0.0174	2.2453	2.2627
73.6	0.3671	0.0042	2.2493	2.2535
73.6333	0.3674	0.0174	2.2506	2.268
73.6667	0.3691	0.0305	2.2506	2.2811
73.7	0.3667	0.0174	2.2559	2.2732
73.7333	0.3674	0.0174	2.2572	2.2745
73.7667	0.3687	0.0174	2.2624	2.2798
73.8	0.3691	0.0042	2.2572	2.2614
73.8333	0.3697	0.0174	2.2651	2.2824
73.8667	0.3707	0.0042	2.2664	2.2706
73.9	0.3704	0.0305	2.2677	2.2982
73.9333	0.372	0.0042	2.2743	2.2785
73.9667	0.3717	0.0174	2.2756	2.2929
74	0.3697	0.0174	2.2703	2.2877
74.0333	0.37	0	2.2782	2.2782
74.0667	0.3677	0.0042	2.2782	2.2824
74.1	0.3707	0.0042	2.2795	2.2837
74.1333	0.37	0	2.2795	2.2795
74.1667	0.3697	0.0174	2.2861	2.3035
74.2	0.3641	0	2.2848	2.2848
74.2333	0.3608	0	2.2861	2.2861
74.2667	0.3654	0.0042	2.2901	2.2943
74.3	0.3664	0.0174	2.2861	2.3035
74.3333	0.3648	0.0174	2.2901	2.3074
74.3667	0.3641	0.0042	2.294	2.2982
74.4	0.3651	0.0042	2.2966	2.3008
74.4333	0.3674	0.0174	2.2953	2.3127
74.4667	0.3648	0.0042	2.2979	2.3022
74.5	0.3618	0	2.2979	2.2979



Project No. G101276459SAT-019

Time (min)	Ch 1 dP	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
(11111)	(psi)	(LFIVI)	(LFIVI)	(LFIVI)
74.5333	0.3635	0.0174	2.2979	2.3153
74.5667	0.3667	0.0042	2.3019	2.3061
74.6	0.3661	0.0042	2.3045	2.3087
74.6333	0.3667	0.0042	2.3058	2.31
74.6667	0.3651	0.0042	2.3058	2.31
74.7	0.3664	0.0042	2.3085	2.3127
74.7333	0.3664	0	2.3019	2.3019
74.7667	0.3644	0.0042	2.3071	2.3114
74.8	0.3667	0.0042	2.3019	2.3061
74.8333	0.3621	0.0174	2.3085	2.3258
74.8667	0.3644	0.0174	2.3058	2.3232
74.9	0.3641	0.0042	2.3124	2.3166
74.9333	0.3667	0	2.3045	2.3045
74.9667	0.3641	0.0042	2.3085	2.3127
75	0.3658	0.0042	2.3071	2.3114
75.0333	0.3648	0.0042	2.3098	2.314
75.0667	0.3641	0.0174	2.3071	2.3245
75.1	0.3658	0.0042	2.3124	2.3166
75.1333	0.3677	0.0042	2.3098	2.314
75.1667	0.3635	0.0174	2.3137	2.3311
75.2	0.3658	0.0174	2.3058	2.3232
75.2333	0.3641	0.0174	2.3111	2.3284
75.2667	0.3638	0.0305	2.3098	2.3403
75.3	0.3654	0.0174	2.315	2.3324
75.3333	0.3638	0.0042	2.3242	2.3284
75.3667	0.3658	0.0042	2.315	2.3192
75.4	0.3628	0.0042	2.3203	2.3245
75.4333	0.3641	0.0174	2.3177	2.335
75.4667	0.3638	0.0174	2.3085	2.3258
75.5	0.3608	0.0042	2.315	2.3192
75.5333	0.3625	0.0437	2.3164	2.36
75.5667	0.3644	0.0174	2.3137	2.3311
75.6	0.3635	0.0042	2.3124	2.3166
75.6333	0.3654	0.0042	2.3032	2.3074
75.6667	0.3625	0.0174	2.3058	2.3232
75.7	0.3651	0.0042	2.3006	2.3048
75.7333	0.3625	0.0174	2.2966	2.314
75.7667	0.3628	0.0174	2.3032	2.3206
75.8	0.3631	0.0042	2.3071	2.3114
75.8333	0.3628	0.0174	2.3032	2.3206
75.8667	0.3641	0.0305	2.3019	2.3324
75.9	0.3595	0	2.3019	2.3019
75.9333	0.3635	0.0174	2.3006	2.3179



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
(min)	(psi)	(LPIVI)	(LPIVI)	(LPIVI)
75.9667	0.3641	0.0174	2.2966	2.314
76	0.3621	0.0042	2.2966	2.3008
76.0333	0.3631	0.0042	2.2966	2.3008
76.0667	0.3621	0.0042	2.3032	2.3074
76.1	0.3641	0.0174	2.3006	2.3179
76.1333	0.3618	0.0174	2.2993	2.3166
76.1667	0.3598	0.0042	2.2979	2.3022
76.2	0.3612	0.0174	2.2993	2.3166
76.2333	0.3615	0.0174	2.3032	2.3206
76.2667	0.3625	0.0042	2.3019	2.3061
76.3	0.3625	0.0174	2.3058	2.3232
76.3333	0.3618	0.0305	2.3006	2.3311
76.3667	0.3638	0.0042	2.3019	2.3061
76.4	0.3644	0.0174	2.3006	2.3179
76.4333	0.3625	0.0042	2.3006	2.3048
76.4667	0.3588	0	2.2979	2.2979
76.5	0.3628	0.0042	2.3032	2.3074
76.5333	0.3612	0.0042	2.2953	2.2995
76.5667	0.3628	0.0174	2.3032	2.3206
76.6	0.3625	0.0042	2.3032	2.3074
76.6333	0.3598	0	2.3006	2.3006
76.6667	0.3612	0.0305	2.3058	2.3363
76.7	0.3592	0.0174	2.3058	2.3232
76.7333	0.3608	0.0042	2.3058	2.31
76.7667	0.3598	0.0042	2.2979	2.3022
76.8	0.3612	0.0174	2.3045	2.3219
76.8333	0.3618	0.0174	2.2993	2.3166
76.8667	0.3598	0.0042	2.3006	2.3048
76.9	0.3621	0.0174	2.3019	2.3192
76.9333	0.3618	0.0174	2.3019	2.3192
76.9667	0.3618	0.0174	2.3111	2.3284
77	0.3592	0.0174	2.3111	2.3284
77.0333	0.3588	0.0042	2.3098	2.314
77.0667	0.3598	0.0042	2.3137	2.3179
77.1	0.3608	0.0174	2.3045	2.3219
77.1333	0.3585	0.0042	2.3111	2.3153
77.1667	0.3612	0.0305	2.3124	2.3429
77.2	0.3621	0.0042	2.3111	2.3153
77.2333	0.3608	0.0042	2.3085	2.3127
77.2667	0.3612	0.0174	2.3137	2.3311
77.3	0.3579	0.0042	2.3085	2.3127
77.3333	0.3605	0.0174	2.3085	2.3258
77.3667	0.3585	0.0042	2.3085	2.3127



Project No. G101276459SAT-019

Time		Ch 2 High Flow		
(min)	(psi)	(LPM)	(LPM)	(LPM)
77.4	0.3595	0.0042	2.3085	2.3127
77.4333	0.3565	0.0174	2.3124	2.3298
77.4667	0.3579	0.0305	2.3124	2.3429
77.5	0.3602	0.0174	2.3111	2.3284
77.5333	0.3582	0	2.3177	2.3177
77.5667	0.3608	0.0174	2.3164	2.3337
77.6	0.3569	0.0174	2.319	2.3363
77.6333	0.3598	0.0305	2.3137	2.3442
77.6667	0.3585	0.0042	2.3203	2.3245
77.7	0.3602	0.0042	2.3164	2.3206
77.7333	0.3562	0.0042	2.319	2.3232
77.7667	0.3605	0.0305	2.319	2.3495
77.8	0.3602	0.0042	2.3282	2.3324
77.8333	0.3612	0.0174	2.3256	2.3429
77.8667	0.3592	0.0174	2.3242	2.3416
77.9	0.3569	0.0174	2.3242	2.3416
77.9333	0.3602	0.0042	2.319	2.3232
77.9667	0.3605	0.0174	2.3216	2.339
78	0.3592	0.0042	2.319	2.3232
78.0333	0.3592	0.0042	2.3203	2.3245
78.0667	0.3612	0.0174	2.3229	2.3403
78.1	0.3598	0.0042	2.3137	2.3179
78.1333	0.3602	0.0042	2.3216	2.3258
78.1667	0.3608	0	2.3282	2.3282
78.2	0.3556	0.0174	2.3216	2.339
78.2333	0.3582	0	2.3229	2.3229
78.2667	0.3621	0	2.319	2.319
78.3	0.3602	0.0042	2.3229	2.3271
78.3333	0.3588	0.0174	2.3203	2.3377
78.3667	0.3602	0.0042	2.3216	2.3258
78.4	0.3579	0.0174	2.3098	2.3271
78.4333	0.3582	0.0042	2.3137	2.3179
78.4667	0.3582	0.0042	2.3124	2.3166
78.5	0.3605	0.0042	2.315	2.3192
78.5333	0.3556	0.0174	2.3164	2.3337
78.5667	0.3579	0.0042	2.3137	2.3179
78.6		0.0042	2.315	2.3192
78.6333 78.6667	0.3552 0.3585	0.0042 0.0042	2.315 2.3177	2.3192 2.3219
78.6667	0.3585	0.0042	2.3177	2.3219
78.7333	0.3583	0.0042	2.319	2.3232
78.7667	0.3552	0.0174	2.3203	2.3503
78.8	0.3579	0.0303	2.3164	2.3308
70.0	0.3373	U	2.3104	2.3104



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
70.0000	0.2505	0.0042	2 24 77	2 2240
78.8333	0.3585	0.0042	2.3177	2.3219
78.8667 78.9	0.3559	0.0174	2.3177	2.335
			2.315	2.3192
78.9333 78.9667	0.3569	0.0042 0.0174	2.319 2.319	2.3232 2.3363
	0.3585	0.0174	2.319	2.3363
79 79.0333	0.3595	0.0174	2.319	2.3303
79.0667	0.3562	0.0042	2.315	2.3152
79.1	0.3572	0.0305	2.315	2.3256
79.1333	0.3572	0.0303	2.3137	2.3455
79.1555	0.3559	0.0174	2.3203	2.3245
79.2	0.3569	0.0174	2.315	2.3243
79.2333	0.3565	0.0174	2.3164	2.3324
79.2667	0.3572	0.0042	2.3164	2.3337
79.3	0.3572	0.0042	2.3216	2.3258
79.3333	0.3585	0.0042	2.3164	2.3236
79.3667	0.3549	0.0174	2.315	2.3324
79.4	0.3588	0.0174	2.3177	2.3324
79.4333	0.3546	0.0042	2.319	2.3232
79.4667	0.3592	0.0174	2.3045	2.3232
79.5	0.3595	0.0042	2.3124	2.3166
79.5333	0.3565	0.0174	2.319	2.3363
79.5667	0.3559	0.0042	2.3124	2.3166
79.6	0.3572	0.0174	2.3177	2.335
79.6333	0.3546	0.0174	2.319	2.3363
79.6667	0.3608	0.0042	2.3098	2.314
79.7	0.3572	0.0042	2.315	2.3192
79.7333	0.3569	0.0042	2.315	2.3192
79.7667	0.3556	0.0174	2.315	2.3324
79.8	0.3569	0.0042	2.319	2.3232
79.8333	0.3542	0.0174	2.3177	2.335
79.8667	0.3559	0.0174	2.3137	2.3311
79.9	0.3556	0.0042	2.3111	2.3153
79.9333	0.3575	0.0042	2.3203	2.3245
79.9667	0.3559	0.0042	2.3111	2.3153
80	0.3565	0.0042	2.3111	2.3153
80.0333	0.3569	0.0174	2.3019	2.3192
80.0667	0.3569	0.0174	2.3085	2.3258
80.1	0.3556	0.0042	2.3006	2.3048
80.1333	0.3536	0.0174	2.2993	2.3166
80.1667	0.3585	0.0042	2.3006	2.3048
80.2	0.3582	0.0174	2.2927	2.31
80.2333	0.3595	0.0042	2.3006	2.3048



Project No. G101276459SAT-019

Time	Ch 1 dP	•	Ch 3 Low Flow	
(min)	(psi)	(LPM)	(LPM)	(LPM)
80.2667	0.3569	0.0042	2.3058	2.31
80.3	0.3556	0.0042	2.3019	2.3061
80.3333	0.3565	0.0042	2.3019	2.3061
80.3667	0.3523	0.0174	2.3085	2.3258
80.4	0.3559	0.0042	2.3098	2.314
80.4333	0.3582	0.0174	2.3111	2.3284
80.4667	0.3549	0.0305	2.3071	2.3377
80.5	0.3533	0.0042	2.3058	2.31
80.5333	0.3523	0.0174	2.3032	2.3206
80.5667	0.3565	0.0042	2.3137	2.3179
80.6	0.3559	0.0174	2.3124	2.3298
80.6333	0.3542	0.0174	2.3071	2.3245
80.6667	0.3562	0.0042	2.3111	2.3153
80.7	0.3539	0.0174	2.3164	2.3337
80.7333	0.3559	0.0174	2.3164	2.3337
80.7667	0.3539	0.0174	2.319	2.3363
80.8	0.3565	0.0042	2.3085	2.3127
80.8333	0.3552	0.0042	2.3098	2.314
80.8667	0.3549	0.0174	2.3124	2.3298
80.9	0.3582	0.0042	2.315	2.3192
80.9333	0.3526	0.0042	2.3124	2.3166
80.9667	0.3539	0.0042	2.3137	2.3179
81	0.3569	0.0174	2.3137	2.3311
81.0333	0.3559	0.0042	2.3111	2.3153
81.0667	0.3549	0.0174	2.3071	2.3245
81.1	0.3523	0.0042	2.3058	2.31
81.1333	0.3559	0.0042	2.3058	2.31
81.1667	0.3569	0.0174	2.3058	2.3232
81.2	0.3556	0.0305	2.3006	2.3311
81.2333	0.3549	0.0042	2.3019	2.3061
81.2667	0.3549	0.0042	2.3058	2.31
81.3	0.3595	0.0174	2.3071	2.3245
81.3333	0.3529	0.0042	2.3098	2.314
81.3667	0.3572	0.0305	2.3111	2.3416
81.4	0.3552	0.0042	2.3032	2.3074
81.4333	0.3529	0.0174	2.3032	2.3206
81.4667	0.3559	0.0042	2.3045	2.3087
81.5	0.3526	0.0042	2.3019	2.3061
81.5333	0.3523	0.0174	2.3019	2.3192
81.5667	0.3526	0.0174	2.3019	2.3192
81.6	0.3506	0.0042	2.2979	2.3022
81.6333	0.3552	0.0042	2.3019	2.3061
81.6667	0.3542	0.0174	2.3006	2.3179



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
81.7	0.3546	0.0174	2.3006	2.3179
81.7333	0.3546	0.0174	2.3058	2.3232
81.7667	0.3529	0.0042	2.3019	2.3061
81.8	0.3539	0.0174	2.3032	2.3206
81.8333	0.3559	0.0042	2.3071	2.3114
81.8667	0.3539	0.0042	2.3098	2.314
81.9	0.3546	0.0174	2.3032	2.3206
81.9333	0.3546	0.0174	2.3098	2.3271
81.9667	0.3539	0.0042	2.3019	2.3061
82	0.3549	0	2.3032	2.3032
82.0333	0.3523	0.0174	2.3032	2.3206
82.0667	0.3549	0.0042	2.3045	2.3087
82.1	0.3536	0.0042	2.3124	2.3166
82.1333	0.3523	0.0174	2.3045	2.3219
82.1667	0.3549	0.0042	2.3071	2.3114
82.2	0.3533	0.0305	2.2953	2.3258
82.2333	0.3526	0.0042	2.3058	2.31
82.2667	0.3536	0.0174	2.3058	2.3232
82.3	0.3536	0.0174	2.3085	2.3258
82.3333	0.3552	0.0042	2.3058	2.31
82.3667	0.3549	0.0174	2.3045	2.3219
82.4	0.3526	0.0174	2.3071	2.3245
82.4333	0.3542	0.0305	2.3071	2.3377
82.4667	0.3523	0.0042	2.3071	2.3114
82.5	0.3529	0.0042	2.3032	2.3074
82.5333	0.3523	0.0042	2.3071	2.3114
82.5667	0.3533	0.0042	2.3058	2.31
82.6	0.3529	0.0042	2.3071	2.3114
82.6333	0.3549	0.0042	2.3045	2.3087
82.6667	0.3565	0.0042	2.3111	2.3153
82.7	0.3562	0	2.3124	2.3124
82.7333	0.3562	0.0174	2.3032	2.3206
82.7667	0.3546	0.0042	2.3071	2.3114
82.8	0.3579	0.0042	2.3111	2.3153
82.8333	0.3559	0.0174	2.3085	2.3258
82.8667	0.3572	0.0305	2.3137	2.3442
82.9	0.3572	0.0174	2.3071	2.3245
82.9333	0.3546	0.0174	2.3071	2.3245
82.9667	0.3575	0.0042	2.3071	2.3114
83	0.3569	0.0174	2.3085	2.3258
83.0333	0.3562	0	2.3058	2.3058
83.0667	0.3595	0.0174	2.3124	2.3298
83.1	0.3585	0.0174	2.3058	2.3232



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
	0.0565	0.0040	2 2252	2.24
83.1333	0.3565	0.0042	2.3058	2.31
83.1667	0.3575	0.0174	2.3058	2.3232
83.2	0.3592	0.0042	2.3045	2.3087
83.2333	0.3605	0.0042	2.3058	2.31
83.2667	0.3621	0.0042	2.3006	2.3048
83.3	0.3595	0.0042	2.3045	2.3087
83.3333	0.3582	0.0042	2.3098	2.314
83.3667	0.3618	0.0042	2.3098	2.314
83.4	0.3588	0.0174	2.3098	2.3271
83.4333	0.3605	0.0042	2.3124	2.3166
83.4667	0.3602	0.0174	2.315	2.3324
83.5	0.3588	0.0174	2.3124	2.3298
83.5333	0.3582	0.0174	2.3164	2.3337
83.5667	0.3572	0.0042	2.3111	2.3153
83.6	0.3621	0.0042	2.3164	2.3206
83.6333	0.3585	0.0305	2.3137	2.3442
83.6667	0.3595	0.0042	2.3137	2.3179
83.7	0.3625	0.0305	2.319	2.3495
83.7333	0.3562	0.0042	2.3177	2.3219
83.7667	0.3615	0.0174	2.3216	2.339
83.8	0.3602	0.0042	2.3203	2.3245
83.8333	0.3631	0.0042	2.3229	2.3271
83.8667	0.3612	0.0174	2.3164	2.3337
83.9	0.3631	0.0174	2.3177	2.335
83.9333	0.3628	0.0174	2.319	2.3363
83.9667	0.3608	0.0042	2.3203	2.3245
84	0.3602	0.0174	2.3229	2.3403
84.0333	0.3661	0.0042	2.3242	2.3284
84.0667	0.3625	0.0042	2.3242	2.3284
84.1	0.3644	0.0174	2.3282	2.3455
84.1333	0.3598	0.0174	2.319	2.3363
84.1667	0.3621	0.0174	2.3269	2.3442
84.2	0.3635	0.0174	2.3269	2.3442
84.2333	0.3644	0.0174	2.3216	2.339
84.2667	0.3635	0.0042	2.3242	2.3284
84.3	0.3621	0.0042	2.3229	2.3271
84.3333	0.3654	0.0174	2.3177	2.335
84.3667	0.3638	0.0174	2.3203	2.3377
84.4	0.3661	0.0174	2.3164	2.3337
84.4333	0.3654	0.0042	2.3124	2.3166
84.4667	0.3641	0.0042	2.319	2.3232
84.5	0.3651	0.0174	2.3216	2.339
84.5333	0.3644	0.0042	2.3216	2.3258



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
84.5667	0.3671	0.0042	2.3229	2.3271
84.6	0.3651	0.0174	2.3229	2.3403
84.6333	0.3667	0.0042	2.3242	2.3284
84.6667	0.3651	0.0042	2.3269	2.3311
84.7	0.3687	0.0042	2.3164	2.3206
84.7333	0.3641	0.0042	2.3216	2.3258
84.7667	0.3667	0	2.3177	2.3177
84.8	0.3631	0.0174	2.3269	2.3442
84.8333	0.3667	0.0042	2.3269	2.3311
84.8667	0.3644	0	2.3308	2.3308
84.9	0.3661	0.0042	2.3269	2.3311
84.9333	0.3677	0.0174	2.3282	2.3455
84.9667	0.3641	0.0042	2.3269	2.3311
85	0.3664	0.0042	2.3256	2.3298
85.0333	0.3648	0.0174	2.3269	2.3442
85.0667	0.3658	0.0174	2.3334	2.3508
85.1	0.3674	0	2.3269	2.3269
85.1333	0.3677	0.0042	2.3203	2.3245
85.1667	0.3658	0.0305	2.3256	2.3561
85.2	0.3671	0.0042	2.3269	2.3311
85.2333	0.3651	0.0174	2.3282	2.3455
85.2667	0.3674	0.0174	2.3229	2.3403
85.3	0.3651	0.0042	2.3269	2.3311
85.3333	0.3677	0.0174	2.3203	2.3377
85.3667	0.3691	0.0042	2.3269	2.3311
85.4	0.3677	0.0042	2.3256	2.3298
85.4333	0.3697	0.0305	2.3229	2.3534
85.4667	0.3714	0.0042	2.3242	2.3284
85.5	0.3654	0.0042	2.3216	2.3258
85.5333	0.3667	0.0174	2.3203	2.3377
85.5667	0.3687	0.0042	2.319	2.3232
85.6	0.3674	0.0305	2.3269	2.3574
85.6333	0.3667	0.0042	2.3269	2.3311
85.6667	0.3687	0.0042	2.3321	2.3363
85.7	0.3667	0.0174	2.3348	2.3521
85.7333	0.37	0.0174	2.3295	2.3469
85.7667	0.3674	0	2.3308	2.3308
85.8	0.3694	0.0174	2.3361	2.3534
85.8333	0.371	0.0042	2.34	2.3442
85.8667	0.3674	0.0305	2.3413	2.3718
85.9	0.373	0.0174	2.3413	2.3587
85.9333	0.3687	0.0174	2.3427	2.36
85.9667	0.3694	0.0042	2.3453	2.3495



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
86	0.37	0.0174	2.3505	2.3679
86.0333	0.373	0.0305	2.3545	2.385
86.0667	0.3697	0.0042	2.3584	2.3626
86.1	0.3691	0.0042	2.3558	2.36
86.1333	0.3707	0.0042	2.3611	2.3653
86.1667	0.3681	0.0042	2.3545	2.3587
86.2	0.3707	0.0174	2.3637	2.381
86.2333	0.3694	0	2.3676	2.3676
86.2667	0.3697	0.0174	2.3637	2.381
86.3	0.371	0.0174	2.3597	2.3771
86.3333	0.3694	0.0042	2.3624	2.3666
86.3667	0.3684	0.0042	2.3545	2.3587
86.4	0.3707	0.0305	2.3584	2.3889
86.4333	0.371	0.0042	2.3532	2.3574
86.4667	0.3727	0.0174	2.3505	2.3679
86.5	0.3681	0.0042	2.3466	2.3508
86.5333	0.3733	0.0174	2.3387	2.3561
86.5667	0.3723	0.0174	2.34	2.3574
86.6	0.372	0.0174	2.3427	2.36
86.6333	0.3723	0.0042	2.3361	2.3403
86.6667	0.371	0.0174	2.344	2.3613
86.7	0.3717	0.0174	2.3492	2.3666
86.7333	0.3697	0.0305	2.3466	2.3771
86.7667	0.373	0.0174	2.3519	2.3692
86.8	0.3704	0	2.3492	2.3492
86.8333	0.3697	0.0174	2.3479	2.3653
86.8667	0.372	0.0174	2.3453	2.3626
86.9	0.373	0.0305	2.3427	2.3732
86.9333	0.3707	0.0174	2.3532	2.3705
86.9667	0.374	0.0042	2.3597	2.364
87	0.3697	0.0174	2.3611	2.3784
87.0333	0.372	0.0042	2.3571	2.3613
87.0667	0.373	0	2.3584	2.3584
87.1	0.3704	0.0174	2.3545	2.3718
87.1333	0.3717	0.0042	2.3545	2.3587
87.1667	0.375	0.0042	2.3532	2.3574
87.2	0.3733	0.0174	2.3571	2.3745
87.2333	0.3733	0.0305	2.3597	2.3903
87.2667	0.3743	0.0305	2.3505	2.381
87.3	0.3717	0.0042	2.3571	2.3613
87.3333	0.371	0.0042	2.3558	2.36
87.3667	0.3727	0	2.3545	2.3545
87.4	0.3727	0.0042	2.3519	2.3561



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
87.4333	0.3723	0.0174	2.3558	2.3732
87.4667	0.3743	0.0305	2.3597	2.3903
87.5	0.373	0.0042	2.3532	2.3574
87.5333	0.373	0.0174	2.3597	2.3771
87.5667	0.3773	0.0042	2.3584	2.3626
87.6	0.3727	0.0174	2.3571	2.3745
87.6333	0.3743	0.0042	2.3505	2.3547
87.6667	0.3727	0.0174	2.3505	2.3679
87.7	0.373	0.0042	2.3558	2.36
87.7333	0.374	0.0042	2.3558	2.36
87.7667	0.374	0.0042	2.3545	2.3587
87.8	0.3727	0.0042	2.3558	2.36
87.8333	0.3753	0.0042	2.3571	2.3613
87.8667	0.374	0.0042	2.3492	2.3534
87.9	0.3733	0.0042	2.3532	2.3574
87.9333	0.37	0.0042	2.3519	2.3561
87.9667	0.3756	0.0174	2.3519	2.3692
88	0.3727	0.0174	2.3584	2.3758
88.0333	0.3733	0.0042	2.3519	2.3561
88.0667	0.3743	0.0174	2.3558	2.3732
88.1	0.3753	0.0174	2.3611	2.3784
88.1333	0.3743	0.0042	2.3584	2.3626
88.1667	0.3723	0	2.3584	2.3584
88.2	0.3737	0.0174	2.3558	2.3732
88.2333	0.3746	0.0042	2.3624	2.3666
88.2667	0.371	0.0174	2.3624	2.3797
88.3	0.3717	0.0042	2.3545	2.3587
88.3333	0.3737	0.0174	2.3663	2.3837
88.3667	0.3723	0.0174	2.3716	2.3889
88.4	0.375	0.0042	2.3703	2.3745
88.4333	0.3743	0.0042	2.3597	2.364
88.4667	0.3727	0.0042	2.365	2.3692
88.5	0.3779	0.0174	2.3597	2.3771
88.5333	0.3766	0.0042	2.3637	2.3679
88.5667	0.3723	0.0042	2.3663	2.3705
88.6	0.3727	0.0042	2.3663	2.3705
88.6333	0.3723	0.0174	2.3703	2.3876
88.6667	0.3737	0.0042	2.369	2.3732
88.7	0.3773	0.0305	2.3703	2.4008
88.7333	0.374	0.0174	2.369	2.3863
88.7667	0.373	0.0174	2.3729	2.3903
88.8	0.374	0.0042	2.3716	2.3758
88.8333	0.3753	0.0305	2.369	2.3995



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
88.8667	0.375	0.0174	2.365	2.3824
88.9	0.3733	0.0042	2.365	2.3692
88.9333	0.374	0.0042	2.369	2.3732
88.9667	0.3766	0	2.3637	2.3637
89	0.3766	0.0174	2.3663	2.3837
89.0333	0.3737	0.0042	2.3663	2.3705
89.0667	0.3766	0.0042	2.365	2.3692
89.1	0.374	0.0042	2.3663	2.3705
89.1333	0.3773	0.0042	2.3597	2.364
89.1667	0.375	0.0174	2.3624	2.3797
89.2	0.3684	0.0174	2.3663	2.3837
89.2333	0.3631	0.0174	2.369	2.3863
89.2667	0.3648	0.0042	2.3597	2.364
89.3	0.3648	0.0174	2.3624	2.3797
89.3333	0.3667	0.0042	2.3676	2.3718
89.3667	0.3674	0.0174	2.3611	2.3784
89.4	0.3661	0.0174	2.3663	2.3837
89.4333	0.3651	0.0042	2.3637	2.3679
89.4667	0.3671	0.0174	2.3611	2.3784
89.5	0.3677	0.0305	2.3571	2.3876
89.5333	0.3658	0.0042	2.3597	2.364
89.5667	0.3635	0.0042	2.3637	2.3679
89.6	0.3691	0.0042	2.3611	2.3653
89.6333	0.3667	0.0174	2.3584	2.3758
89.6667	0.3671	0.0042	2.3663	2.3705
89.7	0.3664	0.0174	2.3624	2.3797
89.7333	0.3654	0.0042	2.3624	2.3666
89.7667	0.3677	0.0174	2.3624	2.3797
89.8	0.3681	0	2.3611	2.3611
89.8333	0.3687	0.0174	2.3492	2.3666
89.8667	0.3661	0.0174	2.3571	2.3745
89.9	0.3671	0.0042	2.3545	2.3587
89.9333	0.3687	0.0042	2.3558	2.36
89.9667	0.3671	0.0174	2.3597	2.3771
90	0.3704	0.0174	2.3584	2.3758
90.0333	0.3641	0.0174	2.3519	2.3692
90.0667	0.3654	0.0042	2.3558	2.36
90.1	0.3667	0.0174	2.3624	2.3797
90.1333	0.3681	0.0042	2.3584	2.3626
90.1667	0.3664	0.0042	2.3584	2.3626
90.2	0.3677	0.0174	2.3545	2.3718
90.2333	0.3667	0.0042	2.3505	2.3547
90.2667	0.3691	0.0174	2.3505	2.3679



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
90.3	0.3674	0.0042	2.3532	2.3574
90.3333	0.3681	0.0174	2.3492	2.3666
90.3667	0.3664	0.0174	2.3479	2.3653
90.4	0.3694	0.0042	2.3545	2.3587
90.4333	0.3704	0.0174	2.3505	2.3679
90.4667	0.3651	0.0042	2.3558	2.36
90.5	0.3684	0.0174	2.3519	2.3692
90.5333	0.3671	0.0174	2.3505	2.3679
90.5667	0.3704	0.0042	2.3532	2.3574
90.6	0.3651	0.0042	2.3492	2.3534
90.6333	0.3681	0	2.3466	2.3466
90.6667	0.3684	0.0042	2.3519	2.3561
90.7	0.3684	0.0042	2.3519	2.3561
90.7333	0.3664	0.0042	2.3466	2.3508
90.7667	0.3651	0.0042	2.3492	2.3534
90.8	0.3704	0.0042	2.3532	2.3574
90.8333	0.3667	0.0042	2.3532	2.3574
90.8667	0.3661	0.0174	2.3545	2.3718
90.9	0.3697	0.0174	2.3558	2.3732
90.9333	0.3664	0.0174	2.3545	2.3718
90.9667	0.3667	0.0174	2.3492	2.3666
91	0.3671	0.0042	2.3479	2.3521
91.0333	0.3658	0.0305	2.3584	2.3889
91.0667	0.3681	0.0174	2.365	2.3824
91.1	0.3684	0.0042	2.3532	2.3574
91.1333	0.3664	0.0174	2.3519	2.3692
91.1667	0.3658	0.0305	2.3505	2.381
91.2	0.3687	0.0174	2.3545	2.3718
91.2333	0.3681	0.0042	2.3505	2.3547
91.2667	0.3691	0.0042	2.3466	2.3508
91.3	0.3677	0	2.3466	2.3466
91.3333	0.3687	0.0174	2.3532	2.3705
91.3667	0.3671	0.0042	2.344	2.3482
91.4	0.3667	0.0174	2.3532	2.3705
91.4333	0.3681	0	2.3545	2.3545
91.4667	0.3667	0.0042	2.3532	2.3574
91.5	0.3671	0.0042	2.3584	2.3626
91.5333	0.3648	0.0042	2.3624	2.3666
91.5667	0.3667	0	2.3519	2.3519
91.6	0.3677	0.0042	2.3597	2.364
91.6333	0.3694	0.0042	2.3519	2.3561
91.6667	0.3661	0.0042	2.3558	2.36
91.7	0.3687	0.0042	2.3558	2.36



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
(111111)	(psi)	(LFIVI)	(LFIVI)	(LFIVI)
91.7333	0.3681	0.0042	2.3532	2.3574
91.7667	0.3674	0.0042	2.3558	2.36
91.8	0.3664	0.0174	2.3611	2.3784
91.8333	0.3684	0.0174	2.3584	2.3758
91.8667	0.3658	0.0042	2.3532	2.3574
91.9	0.3664	0.0174	2.3558	2.3732
91.9333	0.3697	0.0174	2.3519	2.3692
91.9667	0.3687	0.0305	2.3466	2.3771
92	0.3681	0.0042	2.3558	2.36
92.0333	0.3671	0.0174	2.3519	2.3692
92.0667	0.37	0.0042	2.3466	2.3508
92.1	0.3674	0.0174	2.3479	2.3653
92.1333	0.3671	0.0305	2.3479	2.3784
92.1667	0.3674	0.0305	2.3505	2.381
92.2	0.3658	0.0042	2.3466	2.3508
92.2333	0.3664	0.0042	2.344	2.3482
92.2667	0.3681	0.0042	2.3519	2.3561
92.3	0.3667	0.0174	2.3479	2.3653
92.3333	0.3674	0.0042	2.3466	2.3508
92.3667	0.3654	0.0042	2.3479	2.3521
92.4	0.3664	0.0174	2.3532	2.3705
92.4333	0.3661	0.0042	2.3545	2.3587
92.4667	0.3658	0.0042	2.3532	2.3574
92.5	0.3687	0.0174	2.3624	2.3797
92.5333	0.3664	0.0174	2.3532	2.3705
92.5667	0.3681	0.0042	2.3505	2.3547
92.6	0.3677	0.0305	2.344	2.3745
92.6333	0.3644	0.0174	2.3479	2.3653
92.6667	0.3687	0.0174	2.3492	2.3666
92.7	0.3684	0.0042	2.3466	2.3508
92.7333	0.3684	0.0042	2.3479	2.3521
92.7667	0.37	0.0174	2.344	2.3613
92.8	0.3667	0.0042	2.3479	2.3521
92.8333	0.3707	0.0042	2.3453	2.3495
92.8667	0.3684	0.0174	2.3479	2.3653
92.9	0.3704	0.0042	2.344	2.3482
92.9333	0.3654	0.0174	2.3479	2.3653
92.9667	0.37	0.0174	2.344	2.3613
93	0.3691	0.0174	2.34	2.3574
93.0333	0.3723	0.0042	2.3427	2.3469
93.0667	0.3714	0.0174	2.344	2.3613
93.1	0.3667	0.0042	2.3453	2.3495
93.1333	0.3694	0.0305	2.3427	2.3732



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
93.1667	0.3677	0.0174	2.3479	2.3653
93.2	0.3667	0.0174	2.3427	2.36
93.2333	0.3677	0.0174	2.3479	2.3653
93.2667	0.3664	0.0174	2.3545	2.3718
93.3	0.3697	0.0042	2.3453	2.3495
93.3333	0.37	0.0042	2.3532	2.3574
93.3667	0.3694	0.0305	2.3505	2.381
93.4	0.3674	0.0042	2.3479	2.3521
93.4333	0.3687	0.0042	2.3505	2.3547
93.4667	0.3684	0.0174	2.34	2.3574
93.5	0.3707	0.0042	2.3413	2.3455
93.5333	0.3658	0.0174	2.3427	2.36
93.5667	0.3707	0.0174	2.3413	2.3587
93.6	0.3707	0.0042	2.3427	2.3469
93.6333	0.3697	0.0042	2.3308	2.335
93.6667	0.3707	0.0174	2.3282	2.3455
93.7	0.3707	0.0042	2.3387	2.3429
93.7333	0.3687	0.0174	2.3374	2.3547
93.7667	0.3681	0.0174	2.3295	2.3469
93.8	0.3694	0.0042	2.3387	2.3429
93.8333	0.3707	0.0042	2.3334	2.3377
93.8667	0.3697	0.0042	2.3374	2.3416
93.9	0.3681	0.0042	2.3427	2.3469
93.9333	0.3694	0.0174	2.3387	2.3561
93.9667	0.3691	0.0042	2.3387	2.3429
94	0.3697	0	2.3374	2.3374
94.0333	0.3694	0.0305	2.3387	2.3692
94.0667	0.3658	0.0174	2.3374	2.3547
94.1	0.3707	0.0042	2.34	2.3442
94.1333	0.3691	0.0042	2.3387	2.3429
94.1667	0.3674	0.0174	2.3413	2.3587
94.2	0.3687	0.0305	2.3427	2.3732
94.2333	0.3691	0.0174	2.3387	2.3561
94.2667	0.3694	0.0305	2.3387	2.3692
94.3	0.3707	0	2.3387	2.3387
94.3333	0.3707	0.0305	2.3387	2.3692
94.3667	0.3707	0.0174	2.3361	2.3534
94.4	0.3677	0.0174	2.3374	2.3547
94.4333	0.3714	0.0042	2.3321	2.3363
94.4667	0.3667	0.0174	2.3361	2.3534
94.5	0.3664	0.0174	2.3413	2.3587
94.5333	0.3684	0.0042	2.3374	2.3416
94.5667	0.3717	0.0174	2.3334	2.3508



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
94.6	0.3674	0.0174	2.34	2.3574
94.6333	0.3697	0.0174	2.34	2.3574
94.6667	0.3671	0.0305	2.3427	2.3732
94.7	0.37	0.0042	2.3427	2.3469
94.7333	0.3707	0.0305	2.3427	2.3732
94.7667	0.3687	0.0174	2.3492	2.3666
94.8	0.3671	0.0174	2.3453	2.3626
94.8333	0.3658	0.0174	2.3505	2.3679
94.8667	0.3674	0.0174	2.3479	2.3653
94.9	0.3651	0.0174	2.3479	2.3653
94.9333	0.3704	0.0042	2.3492	2.3534
94.9667	0.3667	0.0042	2.3466	2.3508
95	0.3684	0.0305	2.3492	2.3797
95.0333	0.3667	0.0042	2.3453	2.3495
95.0667	0.3684	0.0174	2.3479	2.3653
95.1	0.3671	0.0174	2.3505	2.3679
95.1333	0.3664	0.0174	2.3479	2.3653
95.1667	0.3674	0.0174	2.3492	2.3666
95.2	0.3694	0.0042	2.344	2.3482
95.2333	0.3687	0.0174	2.3413	2.3587
95.2667	0.3704	0.0042	2.3387	2.3429
95.3	0.3654	0.0042	2.3413	2.3455
95.3333	0.3674	0.0042	2.3427	2.3469
95.3667	0.3687	0	2.3413	2.3413
95.4	0.3654	0.0174	2.3413	2.3587
95.4333	0.3651	0.0042	2.3374	2.3416
95.4667	0.37	0.0174	2.34	2.3574
95.5	0.3681	0.0305	2.3413	2.3718
95.5333	0.3661	0.0174	2.3387	2.3561
95.5667	0.3671	0.0305	2.3413	2.3718
95.6	0.3661	0.0042	2.344	2.3482
95.6333	0.3681	0.0174	2.3466	2.364
95.6667	0.371	0.0042	2.344	2.3482
95.7	0.3704	0.0305	2.3466	2.3771
95.7333	0.371	0.0042	2.3479	2.3521
95.7667	0.37	0.0174	2.344	2.3613
95.8	0.3687	0.0042	2.344	2.3482
95.8333	0.3684	0.0042	2.3413	2.3455
95.8667	0.3671	0.0042	2.3453	2.3495
95.9	0.3681	0.0174	2.3466	2.364
95.9333	0.37	0.0174	2.34	2.3574
95.9667	0.3687	0.0174	2.3427	2.36
96	0.3671	0.0042	2.3505	2.3547



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
96.0333	0.3667	0.0174	2.3466	2.364
96.0667	0.3684	0	2.3466	2.3466
96.1	0.3687	0.0174	2.3505	2.3679
96.1333	0.3704	0.0042	2.3466	2.3508
96.1667	0.3681	0.0174	2.344	2.3613
96.2	0.3691	0.0042	2.3532	2.3574
96.2333	0.3694	0.0174	2.3479	2.3653
96.2667	0.3664	0.0042	2.3505	2.3547
96.3	0.3667	0.0174	2.3584	2.3758
96.3333	0.3674	0.0042	2.3558	2.36
96.3667	0.3694	0.0174	2.3624	2.3797
96.4	0.3691	0	2.3571	2.3571
96.4333	0.3674	0.0042	2.3584	2.3626
96.4667	0.3674	0.0174	2.3597	2.3771
96.5	0.3661	0.0042	2.3571	2.3613
96.5333	0.3681	0.0042	2.3532	2.3574
96.5667	0.37	0.0042	2.3505	2.3547
96.6	0.3674	0.0174	2.3479	2.3653
96.6333	0.3687	0.0042	2.3505	2.3547
96.6667	0.3667	0.0042	2.3545	2.3587
96.7	0.371	0.0174	2.3492	2.3666
96.7333	0.3687	0.0042	2.3532	2.3574
96.7667	0.3674	0.0174	2.3505	2.3679
96.8	0.3674	0.0174	2.3466	2.364
96.8333	0.3674	0.0305	2.3479	2.3784
96.8667	0.3651	0.0042	2.3532	2.3574
96.9	0.37	0.0174	2.3505	2.3679
96.9333	0.37	0.0042	2.3519	2.3561
96.9667	0.3687	0.0042	2.3545	2.3587
97	0.3661	0.0305	2.3624	2.3929
97.0333	0.3664	0.0042	2.3466	2.3508
97.0667	0.3687	0.0174	2.3505	2.3679
97.1	0.3694	0.0042	2.3545	2.3587
97.1333	0.3691	0.0174	2.3519	2.3692
97.1667	0.3707	0	2.3545	2.3545
97.2	0.3691	0.0042	2.3466	2.3508
97.2333	0.3707	0.0174	2.3545	2.3718
97.2667	0.3687	0.0174	2.3532	2.3705
97.3	0.3651	0.0042	2.3519	2.3561
97.3333	0.3667	0.0174	2.3492	2.3666
97.3667	0.3654	0.0174	2.3492	2.3666
97.4	0.3677	0.0174	2.344	2.3613
97.4333	0.3667	0.0042	2.3492	2.3534



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
97.4667	0.3661	0.0174	2.3492	2.3666
97.5	0.3694	0.0174	2.3545	2.3718
97.5333	0.3677	0.0174	2.3479	2.3653
97.5667	0.3677	0.0174	2.3466	2.364
97.6	0.3664	0.0042	2.3505	2.3547
97.6333	0.3684	0.0042	2.3453	2.3495
97.6667	0.3681	0.0042	2.3479	2.3521
97.7	0.3661	0.0174	2.3466	2.364
97.7333	0.3681	0.0174	2.3466	2.364
97.7667	0.3691	0.0174	2.3479	2.3653
97.8	0.37	0.0042	2.3466	2.3508
97.8333	0.3651	0.0174	2.3532	2.3705
97.8667	0.3664	0.0042	2.3413	2.3455
97.9	0.3651	0.0174	2.3453	2.3626
97.9333	0.3661	0.0174	2.3519	2.3692
97.9667	0.371	0.0174	2.3519	2.3692
98	0.3654	0	2.3584	2.3584
98.0333	0.3661	0.0305	2.365	2.3955
98.0667	0.3674	0.0042	2.3597	2.364
98.1	0.3704	0.0042	2.3505	2.3547
98.1333	0.3684	0.0042	2.3558	2.36
98.1667	0.3684	0.0042	2.3624	2.3666
98.2	0.3677	0.0174	2.3519	2.3692
98.2333	0.3671	0.0174	2.3532	2.3705
98.2667	0.3651	0.0042	2.3519	2.3561
98.3	0.3681	0.0305	2.3427	2.3732
98.3333	0.3661	0.0174	2.3453	2.3626
98.3667	0.3691	0.0174	2.3492	2.3666
98.4	0.3677	0.0042	2.3466	2.3508
98.4333	0.3674	0.0042	2.3453	2.3495
98.4667	0.3681	0.0174	2.344	2.3613
98.5	0.3664	0.0042	2.3519	2.3561
98.5333	0.3674	0.0042	2.3492	2.3534
98.5667	0.3681	0.0042	2.3519	2.3561
98.6	0.3674	0.0174	2.3479	2.3653
98.6333	0.3687	0.0042	2.3466	2.3508
98.6667	0.3667	0.0174	2.3479	2.3653
98.7	0.3677	0.0174	2.3466	2.364
98.7333	0.3681	0.0042	2.3505	2.3547
98.7667	0.3674	0.0174	2.3466	2.364
98.8	0.3681	0.0174	2.3571	2.3745
98.8333	0.3661	0.0174	2.3532	2.3705
98.8667	0.3681	0.0174	2.3532	2.3705



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
()		(=::::,		
98.9	0.3664	0	2.3479	2.3479
98.9333	0.3674	0.0174	2.3453	2.3626
98.9667	0.3654	0.0042	2.3427	2.3469
99	0.3674	0.0174	2.3387	2.3561
99.0333	0.3684	0.0042	2.34	2.3442
99.0667	0.3687	0.0042	2.3479	2.3521
99.1	0.3674	0.0174	2.3505	2.3679
99.1333	0.3684	0.0174	2.3466	2.364
99.1667	0.3667	0.0042	2.34	2.3442
99.2	0.3667	0.0042	2.3466	2.3508
99.2333	0.3677	0.0305	2.3348	2.3653
99.2667	0.3638	0.0174	2.3387	2.3561
99.3	0.3681	0.0042	2.3374	2.3416
99.3333	0.3671	0.0174	2.3321	2.3495
99.3667	0.3667	0.0042	2.3387	2.3429
99.4	0.3641	0.0174	2.34	2.3574
99.4333	0.3677	0.0042	2.3427	2.3469
99.4667	0.3667	0.0174	2.3374	2.3547
99.5	0.3687	0.0305	2.34	2.3705
99.5333	0.3671	0.0305	2.3453	2.3758
99.5667	0.3651	0.0174	2.3387	2.3561
99.6	0.3681	0.0042	2.34	2.3442
99.6333	0.3654	0.0174	2.3413	2.3587
99.6667	0.3664	0.0042	2.3334	2.3377
99.7	0.3658	0.0174	2.3348	2.3521
99.7333	0.3651	0	2.3308	2.3308
99.7667	0.3667	0.0042	2.3321	2.3363
99.8	0.3648	0.0042	2.3348	2.339
99.8333 99.8667	0.3671 0.3661	0.0174	2.3374	2.3547
99.8667	0.3651	0.0042 0.0174	2.3295 2.3348	2.3337 2.3521
99.9333	0.3684	0.0042	2.3361	2.3403
99.9667	0.3684	0.0042	2.3348	2.3403
100	0.3691	0.0042	2.3361	2.3534
100.0333	0.3681	0.0174	2.3348	2.3521
100.0553	0.3684	0.0305	2.3348	2.3653
100.0007	0.3733	0.0042	2.3295	2.3337
100.1333	0.3786	0.0174	2.34	2.3574
100.1667	0.3819	0.0174	2.3334	2.3374
100.2	0.3819	0.0305	2.3374	2.3679
100.2333	0.3868	0.0042	2.3361	2.3403
100.2667	0.3908	0.0042	2.3413	2.3455
100.3	0.3918	0.0042	2.3466	2.3508



Areva NP Inc. Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
()	(1231)	(LI IVI)	(27.141)	(LI WI)
100.3333	0.3987	0.0042	2.3492	2.3534
100.3667	0.3993	0.0174	2.3519	2.3692
100.4	0.4023	0.0042	2.3532	2.3574
100.4333	0.4049	0.0042	2.3532	2.3574
100.4667	0.4105	0.0174	2.3597	2.3771
100.5	0.4118	0.0174	2.3597	2.3771
100.5333	0.4158	0.0042	2.3637	2.3679
100.5667	0.4178	0.0174	2.3703	2.3876
100.6	0.4263	0.0174	2.3795	2.3968
100.6333	0.4355	0.0174	2.386	2.4034
100.6667	0.4415	0.0042	2.3887	2.3929
100.7	0.4513	0	2.4005	2.4005
100.7333	0.4596	0.0042	2.4031	2.4073
100.7667	0.4681	0.0174	2.4137	2.431
100.8	0.4754	0.0174	2.4215	2.4389
100.8333	0.4852	0.0042	2.4334	2.4376
100.8667	0.4925	0.0174	2.4452	2.4626
100.9	0.4997	0	2.4518	2.4518
100.9333	0.5089	0.0042	2.4623	2.4665
100.9667	0.5149	0.0174	2.4728	2.4902
101	0.5224	0.0042	2.4978	2.502
101.0333	0.531	0.0174	2.511	2.5283
101.0667	0.5399	0	2.5162	2.5162
101.1	0.5445	0.0174	2.5333	2.5507
101.1333	0.5534	0.0305	2.5557	2.5862
101.1667	0.5587	0.0174	2.5728	2.5901
101.2	0.5662	0.0042	2.5872	2.5914
101.2333	0.5715	0.0174	2.5978	2.6151
101.2667	0.5774	0.0174	2.6149	2.6322
101.3	0.5847	0.0042	2.6293	2.6335
101.3333	0.5903	0.0042	2.6477	2.6519
101.3667	0.5975	0.0174	2.6701	2.6874
101.4	0.6044	0.0174	2.6859	2.7032
101.4333	0.609	0.0042	2.7082	2.7124
101.4667	0.613	0.0042	2.7266	2.7308
101.5	0.6228	0.0174	2.7477	2.765
101.5333	0.6261	0.0174	2.7582	2.7755
101.5667	0.6321	0.0174	2.7766	2.794
101.6	0.6373	0.0174	2.7937	2.811
101.6333	0.6403	0.0174	2.8174	2.8347
101.6667	0.6472	0.0042	2.8292	2.8334
101.7	0.6498	0.0305	2.8529	2.8834
101.7333	0.6548	0.0174	2.866	2.8834



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Time (min)	Ch 1 dP	•	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPIVI)
101.7667	0.6584	0.0174	2.8871	2.9044
101.8	0.666	0.0174	2.9028	2.9202
101.8333	0.6709	0.0042	2.9186	2.9228
101.8667	0.6735	0.0042	2.941	2.9452
101.9	0.6788	0.0174	2.9554	2.9728
101.9333	0.6808	0.0174	2.9725	2.9899
101.9667	0.6874	0.0042	2.9922	2.9965
102	0.6916	0.0305	3.0093	3.0399
102.0333	0.6976	0.0042	3.033	3.0372
102.0667	0.6989	0.0042	3.0554	3.0596
102.1	0.7032	0.0174	3.0751	3.0924
102.1333	0.7032	0.0305	3.0843	3.1148
102.1667	0.7094	0.0174	3.0974	3.1148
102.2	0.713	0	3.1172	3.1172
102.2333	0.7167	0.0042	3.1395	3.1437
102.2667	0.7176	0.0042	3.1553	3.1595
102.3	0.7223	0.0042	3.175	3.1792
102.3333	0.7255	0.0174	3.1934	3.2108
102.3667	0.7282	0.0174	3.2026	3.22
102.4	0.7315	0.0174	3.2158	3.2332
102.4333	0.7328	0.0042	3.2316	3.2358
102.4667	0.7321	0.0305	3.2605	3.291
102.5	0.7371	0.0174	3.2684	3.2858
102.5333	0.74	0.0042	3.2868	3.291
102.5667	0.7446	0.0174	3.2986	3.316
102.6	0.7446	0.0174	3.3118	3.3291
102.6333	0.745	0.0174	3.3276	3.3449
102.6667	0.7357	0.0174	3.342	3.3594
102.7	0.7252	0.0174	3.3631	3.3804
102.7333	0.719	0.0042	3.371	3.3752
102.7667	0.7236	0.0174	3.3815	3.3988
102.8	0.7265	0.0042	3.3959	3.4002
102.8333	0.7246	0.0174	3.4104	3.4278
102.8667	0.7209	0.0174	3.4157	3.433
102.9	0.7216	0.0174	3.4288	3.4462
102.9333	0.7157	0.0174	3.438	3.4554
102.9667	0.7173	0.0174	3.4525	3.4698
103	0.715	0.0437	3.4604	3.504
103.0333	0.7144	0.0042	3.4735	3.4777
103.0667	0.7134	0	3.4854	3.4854
103.1	0.7104	0.0174	3.4972	3.5146
103.1333	0.7111	0.0174	3.513	3.5303
103.1667	0.7101	0.0305	3.5156	3.5461



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
103.2	0.7088	0.0174	3.5288	3.5461
103.2333	0.7097	0.0174	3.5314	3.5487
103.2667	0.7101	0.0174	3.5366	3.554
103.3	0.7058	0.0042	3.5498	3.554
103.3333	0.7065	0.0042	3.5629	3.5672
103.3667	0.7055	0.0174	3.5708	3.5882
103.4	0.7022	0.0174	3.5814	3.5987
103.4333	0.7032	0.0174	3.5892	3.6066
103.4667	0.7028	0.0174	3.5998	3.6171
103.5	0.6992	0.0042	3.605	3.6092
103.5333	0.7005	0.0174	3.6129	3.6303
103.5667	0.7002	0.0042	3.6248	3.629
103.6	0.7025	0.0042	3.6261	3.6303
103.6333	0.6992	0.0042	3.6234	3.6276
103.6667	0.6972	0.0042	3.6379	3.6421
103.7	0.7009	0.0305	3.634	3.6645
103.7333	0.6979	0.0042	3.6392	3.6434
103.7667	0.6976	0.0174	3.6497	3.6671
103.8	0.6985	0.0042	3.6484	3.6526
103.8333	0.6959	0.0042	3.6589	3.6631
103.8667	0.6972	0.0305	3.6668	3.6973
103.9	0.6962	0.0174	3.6695	3.6868
103.9333	0.6976	0.0042	3.6747	3.6789
103.9667	0.6956	0.0174	3.6866	3.7039
104	0.6979	0.0174	3.6931	3.7105
104.0333	0.6985	0.0174	3.6944	3.7118
104.0667	0.7005	0.0042	3.6997	3.7039
104.1	0.6995	0.0174	3.7115	3.7289
104.1333	0.7028	0.0042	3.7102	3.7144
104.1667	0.7009	0.0042	3.7129	3.7171
104.2	0.7035	0.0305	3.726	3.7565
104.2333	0.7032	0.0174	3.726	3.7434
104.2667	0.7032	0.0174	3.7326	3.7499
104.3	0.7055	0.0174	3.7378	3.7552
104.3333	0.7022	0.0305	3.7431	3.7736
104.3667	0.7038	0.0305	3.7444	3.7749
104.4	0.7035	0.0042	3.7562	3.7605
104.4333	0.7045	0.0042	3.7576	3.7618
104.4667	0.7038	0.0042	3.7641	3.7683
104.5	0.7051	0	3.7694	3.7694
104.5333	0.7055	0.0174	3.7799	3.7973
104.5667	0.7045	0.0174	3.7825	3.7999
104.6	0.7065	0.0174	3.7812	3.7986



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Time	Ch 1 dP	Ch 2 High Flow		Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
104.6333	0.7051	0.0042	3.7904	3.7946
104.6553	0.7078	0.0042	3.7904	3.7946
104.6667	0.7078	0.0174	3.7918	3.8091
104.7	0.7074	0.0174	3.8023	3.8196
104.7555	0.7048	0.0174	3.7996	3.8038
104.7667	0.7091	0.0174	3.8102	3.8275
104.8333	0.7091	0.0174	3.8102	3.8275
104.8555	0.7104	0.0174	3.8167	3.8341
104.8007	0.7097	0.0174	3.8312	3.8486
104.9333	0.715	0.0042	3.8286	3.8328
104.9553	0.7101	0.0042	3.8325	3.8367
104.3007	0.712	0.0305	3.8391	3.8696
105.0333	0.712	0.0174	3.8496	3.867
105.0667	0.7127	0.0174	3.8522	3.8696
105.1	0.7137	0.0305	3.8601	3.8906
105.1333	0.7124	0.0305	3.8536	3.8841
105.1667	0.7173	0.0174	3.8641	3.8814
105.2	0.7144	0.0305	3.8654	3.8959
105.2333	0.7157	0.0305	3.8733	3.9038
105.2667	0.719	0.0042	3.8759	3.8801
105.3	0.7153	0.0042	3.8838	3.888
105.3333	0.7167	0.0174	3.8851	3.9025
105.3667	0.7203	0.0042	3.8904	3.8946
105.4	0.7229	0.0174	3.8943	3.9117
105.4333	0.7209	0.0042	3.8983	3.9025
105.4667	0.7206	0.0042	3.8996	3.9038
105.5	0.7193	0.0042	3.9022	3.9064
105.5333	0.7229	0.0042	3.9114	3.9156
105.5667	0.7232	0.0042	3.918	3.9222
105.6	0.7262	0.0305	3.918	3.9485
105.6333	0.7259	0	3.9259	3.9259
105.6667	0.7242	0.0174	3.9259	3.9432
105.7	0.7252	0.0174	3.9338	3.9511
105.7333	0.7269	0.0174	3.9351	3.9524
105.7667	0.7272	0.0042	3.943	3.9472
105.8	0.7269	0.0042	3.9443	3.9485
105.8333	0.7255	0.0174	3.9495	3.9669
105.8667	0.7246	0.0042	3.9522	3.9564
105.9	0.7302	0	3.9601	3.9601
105.9333	0.7259	0.0174	3.964	3.9814
105.9667	0.7262	0.0174	3.9732	3.9906
106	0.7262	0.0042	3.9798	3.984
106.0333	0.7315	0.0042	3.9785	3.9827



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
106.0667	0.7282	0.0174	3.9864	4.0037
106.1	0.7318	0.0042	3.9811	3.9853
106.1333	0.7275	0.0174	3.9903	4.0077
106.1667	0.7292	0.0042	3.9943	3.9985
106.2	0.7275	0.0042	3.9956	3.9998
106.2333	0.7305	0.0042	4.0035	4.0077
106.2667	0.7321	0.0174	4.0061	4.0235
106.3	0.7325	0.0174	4.0087	4.0261
106.3333	0.7308	0.0305	4.0166	4.0471
106.3667	0.7302	0	4.0179	4.0179
106.4	0.7305	0.0042	4.0219	4.0261
106.4333	0.7331	0.0174	4.0232	4.0405
106.4667	0.7341	0.0174	4.0284	4.0458
106.5	0.7321	0.0042	4.0337	4.0379
106.5333	0.7321	0.0174	4.0429	4.0603
106.5667	0.7318	0.0305	4.035	4.0655
106.6	0.7348	0.0305	4.0469	4.0774
106.6333	0.7315	0.0174	4.0482	4.0655
106.6667	0.7334	0.0042	4.0534	4.0576
106.7	0.7338	0.0042	4.0587	4.0629
106.7333	0.7351	0.0174	4.0534	4.0708
106.7667	0.7348	0.0174	4.0679	4.0853
106.8	0.7348	0.0042	4.064	4.0682
106.8333	0.7348	0.0042	4.0718	4.076
106.8667	0.7351	0.0042	4.0771	4.0813
106.9	0.7334	0.0042	4.0771	4.0813
106.9333	0.7357	0.0174	4.0797	4.0971
106.9667	0.7341	0.0042	4.0889	4.0931
107	0.7269	0.0042	4.0929	4.0971
107.0333	0.7288	0.0042	4.0942	4.0984
107.0667	0.7288	0.0174	4.0955	4.1129
107.1	0.7282	0.0174	4.0955	4.1129
107.1333	0.7318	0.0174	4.1021	4.1194
107.1667	0.7199	0.0042	4.1021	4.1063
107.2	0.7183	0.0042	4.1073	4.1116
107.2333	0.7186	0.0174	4.11	4.1273
107.2667	0.7203	0.0305	4.1152	4.1457
107.3	0.7203	0.0174	4.1126	4.13
107.3333	0.7173	0.0042	4.1192	4.1234
107.3667	0.7193	0.0042	4.11	4.1142
107.4	0.7209	0	4.1179	4.1179
107.4333	0.719	0.0042	4.1113	4.1155
107.4667	0.7213	0.0174	4.1152	4.1326



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
(111111)	(psi)	(LFIVI)	(LFIVI)	(LFIVI)
107.5	0.7209	0.0042	4.1179	4.1221
107.5333	0.7209	0.0042	4.1205	4.1247
107.5667	0.7209	0.0174	4.1179	4.1352
107.6	0.7193	0.0042	4.1258	4.13
107.6333	0.7229	0.0174	4.1271	4.1444
107.6667	0.7219	0	4.1271	4.1271
107.7	0.7203	0.0042	4.1323	4.1365
107.7333	0.7216	0.0174	4.1323	4.1497
107.7667	0.7229	0.0174	4.1336	4.151
107.8	0.7232	0.0042	4.1389	4.1431
107.8333	0.7252	0.0042	4.1363	4.1405
107.8667	0.7226	0.0174	4.1389	4.1563
107.9	0.7229	0.0174	4.1376	4.1549
107.9333	0.7232	0.0042	4.1402	4.1444
107.9667	0.7226	0.0042	4.1455	4.1497
108	0.7269	0.0174	4.1468	4.1642
108.0333	0.7236	0.0174	4.1521	4.1694
108.0667	0.7232	0.0042	4.1481	4.1523
108.1	0.7246	0.0305	4.1534	4.1839
108.1333	0.7249	0.0042	4.1547	4.1589
108.1667	0.7239	0.0042	4.1547	4.1589
108.2	0.7252	0.0174	4.1599	4.1773
108.2333	0.7239	0.0305	4.1626	4.1931
108.2667	0.7275	0.0042	4.1652	4.1694
108.3	0.7272	0.0174	4.1678	4.1852
108.3333	0.7252	0.0174	4.1665	4.1839
108.3667	0.7246	0	4.1744	4.1744
108.4	0.7275	0.0042	4.1678	4.172
108.4333	0.7278	0.0042	4.1678	4.172
108.4667	0.7259	0.0042	4.1744	4.1786
108.5	0.7282	0.0042	4.1705	4.1747
108.5333	0.7275	0.0305	4.1757	4.2062
108.5667	0.7252	0.0042	4.1797	4.1839
108.6	0.7272	0.0174	4.1823	4.1997
108.6333	0.7285	0.0042	4.181	4.1852
108.6667	0.7275	0.0042	4.1889	4.1931
108.7	0.7278	0.0174	4.1876	4.2049
108.7333	0.7262	0.0174	4.1889	4.2062
108.7667	0.7255	0.0174	4.1954	4.2128
108.8	0.7288	0.0042	4.1981	4.2023
108.8333	0.7298	0.0042	4.202	4.2062
108.8667	0.7298	0.0174	4.2047	4.222
108.9	0.7259	0.0174	4.2099	4.2273



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
108.9333	0.7285	0.0042	4.2152	4.2194
108.9667	0.7292	0.0042	4.2165	4.2207
109	0.7298	0.0042	4.2125	4.2168
109.0333	0.7272	0.0042	4.2244	4.2286
109.0667	0.7308	0.0174	4.2204	4.2378
109.1	0.7295	0.0305	4.231	4.2615
109.1333	0.7288	0.0042	4.2283	4.2325
109.1667	0.7292	0.0042	4.2323	4.2365
109.2	0.7278	0.0174	4.2296	4.247
109.2333	0.7288	0.0042	4.2388	4.2431
109.2667	0.7321	0.0042	4.2388	4.2431
109.3	0.7302	0.0042	4.2415	4.2457
109.3333	0.7308	0.0305	4.248	4.2786
109.3667	0.7298	0.0042	4.2533	4.2575
109.4	0.7282	0.0042	4.248	4.2523
109.4333	0.7318	0.0174	4.2533	4.2707
109.4667	0.7282	0.0042	4.2586	4.2628
109.5	0.7302	0.0042	4.2507	4.2549
109.5333	0.7298	0.0042	4.252	4.2562
109.5667	0.7282	0.0174	4.2586	4.2759
109.6	0.7288	0.0174	4.2599	4.2772
109.6333	0.7302	0.0174	4.2651	4.2825
109.6667	0.7285	0.0174	4.2717	4.2891
109.7	0.7318	0.0042	4.2743	4.2786
109.7333	0.7269	0.0042	4.2809	4.2851
109.7667	0.7295	0.0174	4.2836	4.3009
109.8	0.7288	0.0174	4.2796	4.297
109.8333	0.7272	0.0174	4.2796	4.297
109.8667	0.7308	0.0174	4.2875	4.3049
109.9	0.7282	0.0042	4.2941	4.2983
109.9333	0.7288	0.0042	4.2888	4.293
109.9667	0.7275	0.0042	4.298	4.3022
110	0.7275	0.0042	4.3046	4.3088
110.0333	0.7282	0.0042	4.3072	4.3114
110.0667	0.7302	0.0174	4.3085	4.3259
110.1	0.7295	0.0174	4.3112	4.3285
110.1333	0.7269	0.0174	4.3164	4.3338
110.1667	0.7292	0.0174	4.3151	4.3325
110.2	0.7302	0.0174	4.3191	4.3364
110.2333	0.7282	0	4.3164	4.3164
110.2667	0.7285	0.0042	4.3204	4.3246
110.3	0.7295	0.0174	4.3269	4.3443
110.3333	0.7265	0.0042	4.3217	4.3259



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
110.3667	0.7252	0.0042	4.323	4.3272
110.4	0.7285	0.0042	4.3348	4.339
110.4333	0.7269	0.0174	4.3322	4.3496
110.4667	0.7269	0.0042	4.3322	4.3364
110.5	0.7232	0.0042	4.3335	4.3377
110.5333	0.7302	0.0305	4.3309	4.3614
110.5667	0.7269	0.0042	4.3296	4.3338
110.6	0.7255	0.0042	4.3362	4.3404
110.6333	0.7292	0.0042	4.3335	4.3377
110.6667	0.7285	0.0042	4.3309	4.3351
110.7	0.7255	0.0174	4.3388	4.3561
110.7333	0.7285	0.0174	4.3427	4.3601
110.7667	0.7278	0.0174	4.3414	4.3588
110.8	0.7302	0.0305	4.348	4.3785
110.8333	0.7285	0.0305	4.3493	4.3798
110.8667	0.7259	0.0174	4.3519	4.3693
110.9	0.7275	0.0042	4.3519	4.3561
110.9333	0.7269	0.0042	4.3546	4.3588
110.9667	0.7292	0.0042	4.3585	4.3627
111	0.7242	0.0174	4.3572	4.3745
111.0333	0.7252	0.0174	4.3532	4.3706
111.0667	0.7275	0.0174	4.3559	4.3732
111.1	0.7298	0.0042	4.3585	4.3627
111.1333	0.7255	0.0042	4.3546	4.3588
111.1667	0.7239	0.0042	4.3572	4.3614
111.2	0.7249	0	4.3572	4.3572
111.2333	0.7278	0.0042	4.3598	4.364
111.2667	0.7295	0.0174	4.3598	4.3772
111.3	0.7272	0.0042	4.3638	4.368
111.3333	0.7292	0.0174	4.369	4.3864
111.3667	0.7252	0.0174	4.3638	4.3811
111.4	0.7272	0.0174	4.3677	4.3851
111.4333	0.7292	0.0042	4.3717	4.3759
111.4667	0.7265	0.0174	4.3703	4.3877
111.5	0.7295	0.0174	4.3769	4.3943
111.5333	0.7269	0.0174	4.3769	4.3943
111.5667	0.7265	0.0042	4.3769	4.3811
111.6				4.393
111.6333	0.7278	0.0174	4.3756	4.333
111.6667				
TTT.000,	0.7285	0.0042	4.3809	4.3851
	0.7285 0.7278	0.0042 0.0305	4.3809 4.373	4.3851 4.4035
111.7 111.7 111.7333	0.7285	0.0042	4.3809	4.3851



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
111.8	0.7282	0.0042	4.3809	4.3851
111.8333	0.7282	0.0042	4.3809	4.3851
111.8667	0.7278	0.0174	4.3835	4.4008
111.9	0.7269	0.0174	4.3861	4.4035
111.9333	0.7269	0.0174	4.3901	4.4074
111.9667	0.7272	0.0042	4.3861	4.3903
112	0.7272	0.0305	4.3914	4.4219
112.0333	0.7292	0.0174	4.3861	4.4035
112.0667	0.7242	0.0042	4.3835	4.3877
112.1	0.7246	0.0042	4.3888	4.393
112.1333	0.7252	0.0174	4.3953	4.4127
112.1667	0.7269	0.0174	4.3901	4.4074
112.2	0.7275	0.0174	4.3993	4.4166
112.2333	0.7262	0.0042	4.3966	4.4008
112.2667	0.7246	0.0042	4.4006	4.4048
112.3	0.7265	0.0174	4.3993	4.4166
112.3333	0.7308	0.0305	4.4006	4.4311
112.3667	0.7259	0.0174	4.3993	4.4166
112.4	0.7275	0	4.398	4.398
112.4333	0.7272	0.0174	4.398	4.4153
112.4667	0.7275	0.0174	4.398	4.4153
112.5	0.7278	0.0174	4.398	4.4153
112.5333	0.7285	0.0042	4.3966	4.4008
112.5667	0.7239	0.0174	4.398	4.4153
112.6	0.7275	0.0174	4.3927	4.4101
112.6333	0.7262	0.0042	4.4006	4.4048
112.6667	0.7282	0.0174	4.4045	4.4219
112.7	0.7242	0.0042	4.4006	4.4048
112.7333	0.7259	0.0305	4.4019	4.4324
112.7667	0.7278	0.0305	4.3914	4.4219
112.8	0.7252	0.0305	4.3993	4.4298
112.8333	0.7302	0.0042	4.4006	4.4048
112.8667	0.7282	0.0042	4.4019	4.4061
112.9	0.7262	0.0174	4.4006	4.4179
112.9333	0.7285	0.0174	4.4045	4.4219
112.9667	0.7298	0.0174	4.4019	4.4193
113	0.7262	0	4.4072	4.4072
113.0333	0.7259	0.0042	4.3966	4.4008
113.0667	0.7259	0	4.4032	4.4032
113.1	0.7269	0.0174	4.4058	4.4232
113.1333	0.7252	0	4.3953	4.3953
113.1667	0.7275	0.0174	4.4058	4.4232
113.2	0.7278	0.0174	4.4032	4.4206



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
(111111)	(psi)	(LFIVI)	(LFIVI)	(LPIVI)
113.2333	0.7269	0.0042	4.4111	4.4153
113.2667	0.7249	0.0174	4.4124	4.4298
113.3	0.7249	0	4.4098	4.4098
113.3333	0.7292	0.0305	4.4111	4.4416
113.3667	0.7269	0.0042	4.4098	4.414
113.4	0.7278	0.0174	4.4111	4.4285
113.4333	0.7269	0.0042	4.4032	4.4074
113.4667	0.7295	0.0305	4.4124	4.4429
113.5	0.7275	0.0042	4.4124	4.4166
113.5333	0.7259	0.0174	4.4111	4.4285
113.5667	0.7262	0.0174	4.4098	4.4271
113.6	0.7278	0.0305	4.415	4.4456
113.6333	0.7265	0.0174	4.4111	4.4285
113.6667	0.7275	0.0174	4.4137	4.4311
113.7	0.7236	0.0174	4.4111	4.4285
113.7333	0.7242	0.0042	4.415	4.4193
113.7667	0.7275	0.0174	4.4098	4.4271
113.8	0.7262	0.0174	4.4124	4.4298
113.8333	0.7242	0.0174	4.4032	4.4206
113.8667	0.7249	0.0042	4.4124	4.4166
113.9	0.7226	0.0305	4.4098	4.4403
113.9333	0.7255	0.0042	4.4072	4.4114
113.9667	0.7269	0.0042	4.4098	4.414
114	0.7255	0.0305	4.4111	4.4416
114.0333	0.7259	0.0042	4.4045	4.4087
114.0667	0.7242	0.0174	4.4137	4.4311
114.1	0.7288	0.0042	4.4177	4.4219
114.1333	0.7259	0.0305	4.415	4.4456
114.1667	0.7252	0.0042	4.4111	4.4153
114.2	0.7259	0.0305	4.4058	4.4364
114.2333	0.7265	0.0305	4.4124	4.4429
114.2667	0.7255	0.0042	4.4098	4.414
114.3	0.7252	0.0174	4.4137	4.4311
114.3333	0.7272	0.0042	4.4111	4.4153
114.3667	0.7278	0.0174	4.415	4.4324
114.4	0.7272	0.0305	4.4164	4.4469
114.4333	0.7262	0.0174	4.4177	4.435
114.4667	0.7239	0.0042	4.4124	4.4166
114.5	0.7259	0.0174	4.4216	4.439
114.5333	0.7236	0.0174	4.4216	4.439
114.5667	0.7249	0.0174	4.419	4.4364
114.6	0.7259	0.0174	4.419	4.4364
114.6333	0.7255	0.0042	4.415	4.4193



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
114.6667	0.7265	0.0174	4.4203	4.4377
114.7	0.7255	0.0042	4.4124	4.4166
114.7333	0.7255	0.0174	4.4111	4.4285
114.7667	0.7272	0.0042	4.4203	4.4245
114.8	0.7229	0.0042	4.4137	4.4179
114.8333	0.7259	0.0174	4.4164	4.4337
114.8667	0.7275	0.0174	4.4124	4.4298
114.9	0.7269	0.0042	4.4216	4.4258
114.9333	0.7292	0	4.4111	4.4111
114.9667	0.7265	0.0305	4.4177	4.4482
115	0.7262	0.0042	4.4137	4.4179
115.0333	0.7249	0.0174	4.4216	4.439
115.0667	0.7255	0.0174	4.4177	4.435
115.1	0.7272	0.0174	4.4177	4.435
115.1333	0.7259	0.0042	4.4216	4.4258
115.1667	0.7272	0.0042	4.4216	4.4258
115.2	0.7262	0.0174	4.4203	4.4377
115.2333	0.7249	0.0042	4.4229	4.4271
115.2667	0.7246	0.0042	4.4282	4.4324
115.3	0.7278	0.0042	4.4256	4.4298
115.3333	0.7259	0.0042	4.4203	4.4245
115.3667	0.7265	0.0174	4.4256	4.4429
115.4	0.7272	0.0042	4.4216	4.4258
115.4333	0.7249	0.0042	4.4164	4.4206
115.4667	0.7275	0	4.4124	4.4124
115.5	0.7282	0.0042	4.4124	4.4166
115.5333	0.7259	0.0042	4.4164	4.4206
115.5667	0.7239	0.0174	4.4111	4.4285
115.6	0.7259	0.0042	4.4124	4.4166
115.6333	0.7285	0.0174	4.415	4.4324
115.6667	0.7255	0.0042	4.4124	4.4166
115.7	0.7272	0.0042	4.4164	4.4206
115.7333	0.7295	0.0174	4.4164	4.4337
115.7667	0.7272	0.0174	4.4137	4.4311
115.8	0.7255	0.0305	4.4243	4.4548
115.8333	0.7272	0.0042	4.4072	4.4114
115.8667	0.7249	0.0174	4.4098	4.4271
115.9	0.7249	0.0174	4.4111	4.4285
115.9333	0.7246	0.0174	4.4085	4.4258
115.9667	0.7269	0.0042	4.4124	4.4166
116	0.7278	0.0174	4.4124	4.4298
116.0333	0.7265	0.0042	4.4164	4.4206
116.0667	0.7269	0.0174	4.4085	4.4258



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
116.1	0.7246	0.0174	4.4124	4.4298
116.1333	0.7282	0.0042	4.415	4.4193
116.1667	0.7249	0.0042	4.4124	4.4166
116.2	0.7295	0	4.4137	4.4137
116.2333	0.7249	0.0174	4.4177	4.435
116.2667	0.7242	0.0174	4.415	4.4324
116.3	0.7272	0.0174	4.415	4.4324
116.3333	0.7259	0.0174	4.4177	4.435
116.3667	0.7265	0.0042	4.415	4.4193
116.4	0.7242	0.0174	4.4098	4.4271
116.4333	0.7223	0.0174	4.4058	4.4232
116.4667	0.7259	0.0042	4.4111	4.4153
116.5	0.7249	0.0174	4.4124	4.4298
116.5333	0.7249	0	4.4072	4.4072
116.5667	0.7246	0.0042	4.415	4.4193
116.6	0.7242	0.0174	4.4177	4.435
116.6333	0.7262	0.0305	4.4137	4.4442
116.6667	0.7262	0.0042	4.4124	4.4166
116.7	0.7236	0.0042	4.4111	4.4153
116.7333	0.7246	0.0042	4.4177	4.4219
116.7667	0.7259	0.0174	4.4124	4.4298
116.8	0.7265	0.0042	4.4216	4.4258
116.8333	0.7236	0.0042	4.4124	4.4166
116.8667	0.7246	0.0305	4.4137	4.4442
116.9	0.7275	0.0174	4.4137	4.4311
116.9333	0.7249	0.0042	4.4124	4.4166
116.9667	0.7265	0.0174	4.4256	4.4429
117	0.7252	0.0042	4.4164	4.4206
117.0333	0.7265	0.0174	4.4177	4.435
117.0667	0.7236	0.0042	4.4177	4.4219
117.1	0.7255	0.0174	4.4229	4.4403
117.1333	0.7262	0.0042	4.415	4.4193
117.1667	0.7252	0.0174	4.419	4.4364
117.2	0.7242	0.0042	4.4177	4.4219
117.2333	0.7236	0.0042	4.4177	4.4219
117.2667	0.7242	0.0174	4.4164	4.4337
117.3	0.7239	0.0042	4.415	4.4193
117.3333	0.7242	0.0174	4.4098	4.4271
117.3667	0.7259	0.0305	4.415	4.4456
117.4	0.7272	0.0174	4.4216	4.439
117.4333	0.7252	0.0305	4.4164	4.4469
117.4667	0.7229	0.0174	4.4216	4.439
117.5	0.7252	0.0174	4.4229	4.4403



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)		(LPM)
(min)	(psi)	(LPIVI)	(LPM)	(LPIVI)
117.5333	0.7246	0.0042	4.4203	4.4245
117.5667	0.7259	0.0042	4.4216	4.4258
117.6	0.7249	0.0042	4.4216	4.4258
117.6333	0.7246	0.0174	4.4229	4.4403
117.6667	0.7226	0.0174	4.4203	4.4377
117.7	0.7255	0.0042	4.4203	4.4245
117.7333	0.7239	0.0042	4.4229	4.4271
117.7667	0.7246	0.0305	4.4216	4.4521
117.8	0.7239	0.0042	4.4216	4.4258
117.8333	0.7219	0	4.4243	4.4243
117.8667	0.7229	0.0305	4.4243	4.4548
117.9	0.7209	0.0042	4.419	4.4232
117.9333	0.7259	0	4.4203	4.4203
117.9667	0.7232	0.0174	4.4203	4.4377
118	0.7259	0.0042	4.419	4.4232
118.0333	0.7255	0.0042	4.415	4.4193
118.0667	0.7236	0.0174	4.4164	4.4337
118.1	0.7252	0.0042	4.4124	4.4166
118.1333	0.7278	0.0042	4.415	4.4193
118.1667	0.7229	0.0042	4.419	4.4232
118.2	0.7226	0.0042	4.415	4.4193
118.2333	0.7232	0.0042	4.4124	4.4166
118.2667	0.7232	0.0305	4.4072	4.4377
118.3	0.7213	0.0042	4.4085	4.4127
118.3333	0.7259	0.0042	4.4072	4.4114
118.3667	0.7269	0.0174	4.4072	4.4245
118.4	0.7252	0.0042	4.4019	4.4061
118.4333	0.7229	0.0305	4.4085	4.439
118.4667	0.7229	0.0042	4.4085	4.4127
118.5	0.7242	0.0174	4.4072	4.4245
118.5333 118.5667	0.7229	0.0174	4.4058	4.4232
	0.7259	0.0042	4.4058	4.4101
118.6 118.6333	0.7255 0.7223	0.0303	4.4032 4.4006	4.4337 4.4006
118.6667	0.7239	0.0174	4.4019	4.4193
118.7	0.7252	0.0174	4.4019	4.4193
118.7333	0.7252	0.0174	4.4111	4.4265
118.7667	0.7236	0.0174	4.4085	4.4258
118.7667	0.7238	0.0174	4.4085	4.4258
118.8333	0.7232	0.0042	4.4098	4.4311
118.8667	0.7259	0.0174	4.3993	4.414
118.9	0.7239	0.0305	4.398	4.4285
118.9333	0.7246	0.0042	4.4032	4.4074



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
118.9667	0.7255	0.0042	4.4072	4.4114
119	0.7255	0.0174	4.4045	4.4219
119.0333	0.7249	0.0042	4.3993	4.4035
119.0667	0.7219	0.0174	4.4019	4.4193
119.1	0.7262	0.0042	4.4058	4.4101
119.1333	0.7229	0	4.4032	4.4032
119.1667	0.7236	0.0174	4.4006	4.4179
119.2	0.7249	0.0042	4.4032	4.4074
119.2333	0.7229	0.0174	4.4032	4.4206
119.2667	0.7242	0.0174	4.4006	4.4179
119.3	0.7236	0.0042	4.4032	4.4074
119.3333	0.7226	0.0305	4.4032	4.4337
119.3667	0.7275	0.0174	4.4058	4.4232
119.4	0.7236	0.0042	4.4045	4.4087
119.4333	0.7242	0.0042	4.4072	4.4114
119.4667	0.7255	0.0174	4.4019	4.4193
119.5	0.7236	0.0042	4.4098	4.414
119.5333	0.7242	0.0174	4.4111	4.4285
119.5667	0.7252	0.0174	4.4032	4.4206
119.6	0.7246	0	4.3993	4.3993
119.6333	0.7259	0.0174	4.3993	4.4166
119.6667	0.7262	0.0174	4.4098	4.4271
119.7	0.7259	0.0042	4.4045	4.4087
119.7333	0.7232	0.0174	4.4032	4.4206
119.7667	0.7236	0.0174	4.4032	4.4206
119.8	0.7239	0.0174	4.4045	4.4219
119.8333	0.7223	0.0042	4.4045	4.4087
119.8667	0.7242	0.0174	4.4045	4.4219
119.9	0.7255	0.0042	4.4019	4.4061
119.9333	0.7219	0.0174	4.4058	4.4232
119.9667	0.7249	0.0305	4.4058	4.4364
120	0.7242	0	4.4085	4.4085
120.0333	0.7249	0.0042	4.4058	4.4101
120.0667	0.7239	0.0174	4.4006	4.4179
120.1	0.7229	0.0174	4.4111	4.4285
120.1333	0.7249	0.0042	4.4072	4.4114
120.1667	0.7213	0.0042	4.4098	4.414
120.2	0.7249	0.0042	4.4072	4.4114
120.2333	0.7259	0.0174	4.4072	4.4245
120.2667	0.7209	0.0042	4.3993	4.4035
120.3	0.7236	0.0042	4.4058	4.4101
120.3333	0.7262	0.0174	4.4098	4.4271
120.3667	0.7242	0.0305	4.4032	4.4337



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
120.4	0.7252	0.0042	4.4072	4.4114
120.4333	0.7236	0.0174	4.4058	4.4232
120.4667	0.7223	0.0174	4.4019	4.4193
120.5	0.7275	0.0174	4.4019	4.4193
120.5333	0.7242	0.0174	4.4045	4.4219
120.5667	0.7209	0.0174	4.4058	4.4232
120.6	0.7249	0.0174	4.4032	4.4206
120.6333	0.7203	0.0174	4.4019	4.4193
120.6667	0.7246	0.0042	4.4072	4.4114
120.7	0.7252	0.0042	4.4098	4.414
120.7333	0.7226	0.0174	4.4111	4.4285
120.7667	0.7242	0.0305	4.4019	4.4324
120.8	0.7216	0.0042	4.4072	4.4114
120.8333	0.7236	0.0042	4.4111	4.4153
120.8667	0.7232	0.0174	4.4098	4.4271
120.9	0.7255	0.0305	4.4019	4.4324
120.9333	0.7223	0.0305	4.4085	4.439
120.9667	0.7236	0.0042	4.4124	4.4166
121	0.7236	0.0174	4.4085	4.4258
121.0333	0.7265	0.0174	4.4164	4.4337
121.0667	0.7249	0.0042	4.4124	4.4166
121.1	0.7226	0.0042	4.4072	4.4114
121.1333	0.7272	0.0174	4.4058	4.4232
121.1667	0.7259	0	4.4085	4.4085
121.2	0.7246	0.0042	4.4058	4.4101
121.2333	0.7239	0.0174	4.4111	4.4285
121.2667	0.7219	0.0305	4.4085	4.439
121.3	0.7232	0.0174	4.4058	4.4232
121.3333	0.7219	0.0174	4.4006	4.4179
121.3667	0.7236	0.0042	4.4111	4.4153
121.4	0.7223	0.0042	4.4032	4.4074
121.4333	0.7242	0.0174	4.4085	4.4258
121.4667	0.7209	0.0305	4.4164	4.4469
121.5	0.7223	0.0042	4.4098	4.414
121.5333	0.7213	0.0042	4.4098	4.414
121.5667	0.7259	0.0174	4.4098	4.4271
121.6	0.7255	0.0174	4.4072	4.4245
121.6333	0.7209	0.0174	4.4085	4.4258
121.6667	0.7239	0.0174	4.4137	4.4311
121.7	0.7236	0.0305	4.4098	4.4403
121.7333	0.7246	0	4.4072	4.4072
121.7667	0.7236	0.0042	4.4098	4.414
121.8	0.7219	0.0174	4.4164	4.4337



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
121.8333	0.7226	0.0042	4.4098	4.414
121.8667	0.7242	0.0042	4.415	4.4193
121.9	0.7239	0.0042	4.4098	4.414
121.9333	0.7239	0.0042	4.4072	4.4114
121.9667	0.7246	0.0042	4.4032	4.4074
122	0.7236	0.0042	4.3993	4.4035
122.0333	0.7232	0.0174	4.4111	4.4285
122.0667	0.7203	0.0305	4.4058	4.4364
122.1	0.7239	0.0174	4.4085	4.4258
122.1333	0.7206	0.0174	4.4072	4.4245
122.1667	0.7209	0.0042	4.4111	4.4153
122.2	0.7259	0.0174	4.4098	4.4271
122.2333	0.7199	0.0042	4.4098	4.414
122.2667	0.7242	0.0174	4.4085	4.4258
122.3	0.7216	0.0042	4.4019	4.4061
122.3333	0.7236	0.0042	4.4111	4.4153
122.3667	0.7206	0.0305	4.415	4.4456
122.4	0.7252	0.0042	4.4072	4.4114
122.4333	0.7209	0.0174	4.4032	4.4206
122.4667	0.7242	0.0174	4.4124	4.4298
122.5	0.7232	0.0174	4.4098	4.4271
122.5333	0.7203	0.0042	4.4164	4.4206
122.5667	0.7226	0.0042	4.4164	4.4206
122.6	0.7229	0.0042	4.4177	4.4219
122.6333	0.7232	0.0042	4.4137	4.4179
122.6667	0.7232	0.0174	4.4137	4.4311
122.7	0.7206	0.0042	4.415	4.4193
122.7333	0.7213	0.0305	4.4098	4.4403
122.7667	0.7249	0.0042	4.4085	4.4127
122.8	0.7213	0.0042	4.4098	4.414
122.8333	0.7236	0.0042	4.4111	4.4153
122.8667	0.7239	0.0174	4.415	4.4324
122.9	0.7216	0.0042	4.4124	4.4166
122.9333	0.7206	0.0305	4.4111	4.4416
122.9667	0.7216	0.0042	4.4098	4.414
123	0.7206	0.0305	4.4085	4.439
123.0333	0.7206	0.0174	4.4124	4.4298
123.0667	0.7216	0.0042	4.4164	4.4206
123.1	0.7223	0.0042	4.4137	4.4179
123.1333	0.7249	0.0042	4.4203	4.4245
123.1667	0.7246	0.0042	4.4164	4.4206
123.2	0.7232	0.0042	4.4124	4.4166
123.2333	0.7249	0.0042	4.4098	4.414



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
123.2667	0.7209	0.0174	4.4098	4.4271
123.3	0.7219	0.0174	4.4137	4.4311
123.3333	0.7223	0.0042	4.4098	4.414
123.3667	0.7226	0.0305	4.4111	4.4416
123.4	0.7236	0.0174	4.4111	4.4285
123.4333	0.7216	0.0174	4.4229	4.4403
123.4667	0.7229	0.0174	4.415	4.4324
123.5	0.7226	0.0042	4.4164	4.4206
123.5333	0.7226	0	4.4177	4.4177
123.5667	0.7223	0.0042	4.415	4.4193
123.6	0.7223	0.0174	4.4111	4.4285
123.6333	0.7206	0.0174	4.4124	4.4298
123.6667	0.7236	0.0042	4.4164	4.4206
123.7	0.7206	0.0305	4.4124	4.4429
123.7333	0.7193	0.0174	4.415	4.4324
123.7667	0.7216	0.0174	4.4164	4.4337
123.8	0.7209	0.0305	4.4137	4.4442
123.8333	0.719	0.0174	4.4177	4.435
123.8667	0.7226	0.0042	4.4124	4.4166
123.9	0.7219	0.0042	4.4203	4.4245
123.9333	0.7216	0	4.4177	4.4177
123.9667	0.7232	0.0174	4.4124	4.4298
124	0.7216	0.0042	4.415	4.4193
124.0333	0.7209	0.0174	4.4111	4.4285
124.0667	0.7193	0.0042	4.4111	4.4153
124.1	0.7223	0.0174	4.4124	4.4298
124.1333	0.7223	0.0174	4.415	4.4324
124.1667	0.7193	0	4.4098	4.4098
124.2	0.7203	0.0042	4.415	4.4193
124.2333	0.7209	0.0174	4.4111	4.4285
124.2667	0.7216	0.0042	4.4229	4.4271
124.3	0.7229	0.0042	4.419	4.4232
124.3333	0.7203	0.0042	4.419	4.4232
124.3667	0.7206	0.0305	4.419	4.4495
124.4	0.7226	0	4.415	4.415
124.4333	0.7203	0.0174	4.4111	4.4285
124.4667	0.7216	0.0174	4.4164	4.4337
124.5	0.7193	0.0174	4.4124	4.4298
124.5333	0.7196	0	4.4164	4.4164
124.5667	0.7216	0.0174	4.4137	4.4311
124.6	0.7242	0.0174	4.4111	4.4285
124.6333	0.719	0.0042	4.415	4.4193
124.6667	0.7242	0.0305	4.4085	4.439



Project No. G101276459SAT-019

Time	Ch 1 dP		Ch 3 Low Flow	
(min)	(psi)	(LPM)	(LPM)	(LPM)
124.7	0.7226	0.0305	4.4111	4.4416
124.7333	0.7203	0.0042	4.4072	4.4114
124.7667	0.7209	0.0042	4.4072	4.4114
124.8	0.7236	0.0305	4.4085	4.439
124.8333	0.7213	0.0174	4.4137	4.4311
124.8667	0.7176	0.0174	4.4098	4.4271
124.9	0.7216	0.0042	4.4098	4.414
124.9333	0.7199	0	4.4072	4.4072
124.9667	0.7213	0	4.4137	4.4137
125	0.7186	0.0174	4.4137	4.4311
125.0333	0.7226	0.0174	4.4098	4.4271
125.0667	0.7236	0.0174	4.4058	4.4232
125.1	0.7203	0.0305	4.4111	4.4416
125.1333	0.7209	0.0042	4.4098	4.414
125.1667	0.7229	0.0174	4.4098	4.4271
125.2	0.7186	0.0174	4.4111	4.4285
125.2333	0.7196	0.0305	4.4058	4.4364
125.2667	0.7186	0.0042	4.4098	4.414
125.3	0.7223	0.0305	4.4124	4.4429
125.3333	0.7199	0.0174	4.4111	4.4285
125.3667	0.7209	0.0042	4.4111	4.4153
125.4	0.7203	0.0042	4.4164	4.4206
125.4333	0.7203	0.0042	4.4137	4.4179
125.4667	0.7199	0.0174	4.4124	4.4298
125.5	0.7219	0.0042	4.4085	4.4127
125.5333	0.7216	0.0174	4.4072	4.4245
125.5667	0.7193	0.0042	4.4085	4.4127
125.6	0.718	0.0174	4.4124	4.4298
125.6333	0.7213	0.0174	4.4098	4.4271
125.6667	0.7206	0.0174	4.4058	4.4232
125.7	0.7186	0.0174	4.4072	4.4245
125.7333	0.719	0.0305	4.415	4.4456
125.7667	0.719	0.0174	4.4111	4.4285
125.8	0.7216	0.0042	4.4072	4.4114
125.8333	0.7229	0.0042	4.4072	4.4114
125.8667	0.7213	0.0174	4.4098	4.4271
125.9	0.7216	0.0174	4.4098	4.4271
125.9333	0.7193	0.0042	4.4085	4.4127
125.9667	0.7206	0.0042	4.4058	4.4101
126	0.7196	0.0174	4.4072	4.4245
126.0333	0.7209	0.0174	4.3993	4.4166
126.0667	0.7193	0.0305	4.4058	4.4364
126.1	0.7206	0.0042	4.4098	4.414



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
126.1333	0.7219	0.0174	4.4058	4.4232
126.1667	0.7183	0.0305	4.4085	4.439
126.2	0.7216	0	4.4072	4.4072
126.2333	0.7199	0.0305	4.4098	4.4403
126.2667	0.7196	0.0305	4.4045	4.435
126.3	0.7236	0.0305	4.4085	4.439
126.3333	0.7196	0.0174	4.4072	4.4245
126.3667	0.7193	0.0174	4.4111	4.4285
126.4	0.7223	0.0042	4.4058	4.4101
126.4333	0.7206	0.0174	4.4032	4.4206
126.4667	0.7219	0.0174	4.4019	4.4193
126.5	0.718	0.0174	4.4072	4.4245
126.5333	0.7193	0.0174	4.4058	4.4232
126.5667	0.7232	0	4.4006	4.4006
126.6	0.718	0.0174	4.4006	4.4179
126.6333	0.718	0.0042	4.4019	4.4061
126.6667	0.7176	0.0042	4.4006	4.4048
126.7	0.7203	0.0042	4.4098	4.414
126.7333	0.7196	0.0042	4.4006	4.4048
126.7667	0.7193	0.0042	4.4019	4.4061
126.8	0.7226	0.0305	4.4019	4.4324
126.8333	0.7226	0.0174	4.4058	4.4232
126.8667	0.7206	0.0174	4.4032	4.4206
126.9	0.7209	0.0042	4.3966	4.4008
126.9333	0.718	0.0042	4.3993	4.4035
126.9667	0.7193	0.0174	4.3953	4.4127
127	0.7186	0.0305	4.4006	4.4311
127.0333	0.717	0.0305	4.398	4.4285
127.0667	0.7203	0.0042	4.398	4.4022
127.1	0.718	0.0174	4.3953	4.4127
127.1333	0.7216	0.0174	4.3953	4.4127
127.1667	0.7196	0.0042	4.4019	4.4061
127.2	0.7209	0.0174	4.3993	4.4166
127.2333	0.7203	0.0042	4.4045	4.4087
127.2667	0.7196	0.0174	4.398	4.4153
127.3	0.7203	0.0174	4.4032	4.4206
127.3333	0.7193	0.0042	4.3953	4.3995
127.3667	0.719	0.0174	4.3927	4.4101
127.4	0.7186	0.0042	4.398	4.4022
127.4333	0.7176	0.0042	4.394	4.3982
127.4667	0.7199	0.0174	4.3874	4.4048
127.5	0.7186	0.0042	4.3861	4.3903
127.5333	0.7196	0.0174	4.3901	4.4074



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
127 5667	0.710	0.0042	4 2074	4 2016
127.5667 127.6	0.719	0.0042	4.3874 4.3861	4.3916 4.3903
127.6333	0.719	0.0042	4.3914	4.3956
127.6667	0.7176	0.0042	4.3888	4.3936
127.0007	0.7209	0.0042	4.3888	4.393
127.7333	0.717	0.0174	4.3835	4.4001
127.7667	0.719	0.0174	4.3888	4.4061
127.7667	0.7203	0.0174	4.3888	4.4193
127.8333	0.7183	0.0303	4.3874	4.4048
127.8667	0.7183	0.0042	4.3835	4.3877
127.8007	0.717	0.0042	4.3888	4.393
127.9333	0.717	0.0174	4.3914	4.4087
127.9667	0.717	0.0042	4.3861	4.3903
127.3007	0.719	0.0042	4.3861	4.3861
128.0333	0.7203	0.0174	4.3888	4.4061
128.0667	0.7205	0.0042	4.3835	4.3877
128.1	0.7183	0.0305	4.3874	4.4179
128.1333	0.7157	0.0174	4.3861	4.4035
128.1667	0.7167	0.0174	4.3888	4.4061
128.2	0.7183	0.0174	4.3874	4.4048
128.2333	0.719	0.0305	4.3861	4.4166
128.2667	0.718	0.0042	4.3914	4.3956
128.3	0.7186	0.0174	4.3782	4.3956
128.3333	0.7176	0	4.3914	4.3914
128.3667	0.7199	0.0042	4.3874	4.3916
128.4	0.7203	0.0174	4.3835	4.4008
128.4333	0.7176	0.0174	4.3795	4.3969
128.4667	0.7223	0.0174	4.3835	4.4008
128.5	0.7163	0.0174	4.3848	4.4022
128.5333	0.7173	0.0174	4.3809	4.3982
128.5667	0.7163	0.0174	4.3835	4.4008
128.6	0.7186	0.0174	4.3835	4.4008
128.6333	0.7153	0.0174	4.3888	4.4061
128.6667	0.7196	0.0174	4.3809	4.3982
128.7	0.717	0.0042	4.3835	4.3877
128.7333	0.7163	0.0174	4.3822	4.3995
128.7667	0.7186	0.0305	4.3795	4.4101
128.8	0.7173	0.0174	4.3861	4.4035
128.8333	0.717	0.0437	4.3835	4.4271
128.8667	0.7167	0.0174	4.3782	4.3956
128.9	0.716	0.0042	4.3835	4.3877
128.9333	0.7167	0.0042	4.3901	4.3943
128.9667	0.719	0.0174	4.3874	4.4048



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
129	0.7186	0.0042	4.3835	4.3877
129.0333	0.7209	0.0174	4.3914	4.4087
129.0667	0.7186	0.0042	4.3861	4.3903
129.1	0.7186	0.0174	4.3848	4.4022
129.1333	0.7176	0.0174	4.3861	4.4035
129.1667	0.717	0.0042	4.3835	4.3877
129.2	0.7176	0.0174	4.3835	4.4008
129.2333	0.7186	0.0174	4.3888	4.4061
129.2667	0.7206	0.0174	4.3888	4.4061
129.3	0.7163	0.0174	4.3848	4.4022
129.3333	0.7196	0.0174	4.3835	4.4008
129.3667	0.7163	0.0305	4.3782	4.4087
129.4	0.7196	0.0042	4.3835	4.3877
129.4333	0.7176	0.0042	4.3795	4.3838
129.4667	0.718	0.0042	4.3809	4.3851
129.5	0.7173	0.0174	4.3848	4.4022
129.5333	0.7167	0.0174	4.3901	4.4074
129.5667	0.718	0.0305	4.3888	4.4193
129.6	0.7183	0.0174	4.3861	4.4035
129.6333	0.716	0.0174	4.3848	4.4022
129.6667	0.7176	0.0174	4.3901	4.4074
129.7	0.715	0.0305	4.3809	4.4114
129.7333	0.7183	0.0042	4.3888	4.393
129.7667	0.7199	0.0174	4.3861	4.4035
129.8	0.717	0.0174	4.3888	4.4061
129.8333	0.717	0	4.3861	4.3861
129.8667	0.716	0.0174	4.3822	4.3995
129.9	0.7193	0.0174	4.3874	4.4048
129.9333	0.719	0.0042	4.3874	4.3916
129.9667	0.7167	0.0042	4.3809	4.3851
130	0.7186	0.0042	4.3861	4.3903
130.0333	0.719	0.0174	4.3835	4.4008
130.0667	0.7216	0.0174	4.3835	4.4008
130.1	0.7213	0.0174	4.3848	4.4022
130.1333	0.7206	0.0305	4.3782	4.4087
130.1667	0.719	0.0174	4.3848	4.4022
130.2	0.7176	0.0042	4.3782	4.3824
130.2333	0.717	0.0042	4.3809	4.3851
130.2667	0.7193	0.0042	4.3809	4.3851
130.3	0.719	0.0174	4.3835	4.4008
130.3333	0.718	0.0042	4.3835	4.3877
130.3667	0.7216	0.0042	4.3809	4.3851
130.4	0.7199	0.0174	4.3769	4.3943



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
130.4333	0.7176	0.0174	4.3848	4.4022
130.4667	0.7176	0.0305	4.3822	4.4127
130.5	0.7209	0.0174	4.3769	4.3943
130.5333	0.7216	0.0042	4.3861	4.3903
130.5667	0.7206	0.0305	4.3901	4.4206
130.6	0.7203	0.0174	4.3861	4.4035
130.6333	0.7219	0.0174	4.3901	4.4074
130.6667	0.7193	0.0042	4.3848	4.389
130.7	0.7209	0.0174	4.3874	4.4048
130.7333	0.7223	0.0042	4.3874	4.3916
130.7667	0.718	0.0042	4.3901	4.3943
130.8	0.7193	0.0042	4.3901	4.3943
130.8333	0.7203	0.0174	4.3809	4.3982
130.8667	0.7196	0.0042	4.3861	4.3903
130.9	0.7246	0.0042	4.3835	4.3877
130.9333	0.7219	0.0174	4.3888	4.4061
130.9667	0.7219	0.0174	4.3914	4.4087
131	0.7226	0.0305	4.3927	4.4232
131.0333	0.7242	0.0174	4.3953	4.4127
131.0667	0.7213	0.0305	4.3861	4.4166
131.1	0.7223	0.0042	4.3901	4.3943
131.1333	0.7216	0.0042	4.3914	4.3956
131.1667	0.7216	0.0174	4.3861	4.4035
131.2	0.7216	0.0174	4.3966	4.414
131.2333	0.7236	0.0042	4.398	4.4022
131.2667	0.7226	0.0437	4.3914	4.435
131.3	0.7229	0.0042	4.3888	4.393
131.3333	0.7229	0.0042	4.3861	4.3903
131.3667	0.7229	0.0174	4.3901	4.4074
131.4	0.7246	0	4.394	4.394
131.4333	0.7262	0.0174	4.3966	4.414
131.4667	0.7255	0.0305	4.3953	4.4258
131.5	0.7226	0.0042	4.3953	4.3995
131.5333	0.7269	0.0174	4.3993	4.4166
131.5667	0.7269	0.0174	4.398	4.4153
131.6	0.7265	0.0042	4.4006	4.4048
131.6333	0.7265	0.0042	4.4006	4.4048
131.6667	0.7242	0.0042	4.4019	4.4061
131.7	0.7242	0.0305	4.4058	4.4364
131.7333	0.7278	0.0174	4.3966	4.414
131.7667	0.7255	0.0174	4.3993	4.4166
131.8	0.7252	0.0174	4.4032	4.4206
131.8333	0.7275	0.0042	4.4072	4.4114



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
131.8667	0.7285	0.0042	4.4019	4.4061
131.9	0.7278	0.0042	4.3993	4.4035
131.9333	0.7278	0.0174	4.3966	4.414
131.9667	0.7278	0.0174	4.398	4.4153
132	0.7275	0.0042	4.4098	4.414
132.0333	0.7311	0.0174	4.4032	4.4206
132.0667	0.7285	0.0174	4.4032	4.4206
132.1	0.7272	0.0174	4.3966	4.414
132.1333	0.7288	0.0174	4.394	4.4114
132.1667	0.7311	0.0174	4.4019	4.4193
132.2	0.7308	0.0305	4.4006	4.4311
132.2333	0.7305	0	4.4058	4.4058
132.2667	0.7338	0.0174	4.4006	4.4179
132.3	0.7298	0.0042	4.4019	4.4061
132.3333	0.7302	0.0042	4.4098	4.414
132.3667	0.7311	0	4.4098	4.4098
132.4	0.7295	0.0174	4.4098	4.4271
132.4333	0.7331	0.0305	4.4098	4.4403
132.4667	0.7328	0.0174	4.4085	4.4258
132.5	0.7321	0.0042	4.4098	4.414
132.5333	0.7328	0.0174	4.4098	4.4271
132.5667	0.7341	0.0305	4.4164	4.4469
132.6	0.7321	0.0305	4.4124	4.4429
132.6333	0.7331	0.0174	4.4164	4.4337
132.6667	0.7334	0.0305	4.4243	4.4548
132.7	0.7331	0.0305	4.4229	4.4534
132.7333	0.7351	0.0042	4.4216	4.4258
132.7667	0.7374	0.0174	4.4243	4.4416
132.8	0.7407	0.0174	4.419	4.4364
132.8333	0.7548	0.0042	4.4243	4.4285
132.8667	0.7637	0.0174	4.4321	4.4495
132.9	0.7749	0.0042	4.4348	4.439
132.9333	0.7901	0.0042	4.4374	4.4416
132.9667	0.8088	0.0042	4.444	4.4482
133	0.825	0.0305	4.4532	4.4837
133.0333	0.8408	0.0042	4.4624	4.4666
133.0667	0.8612	0	4.465	4.465
133.1	0.8796	0.0042	4.4769	4.4811
133.1333	0.899	0.0042	4.4939	4.4982
133.1667	0.9207	0	4.5058	4.5058
133.2	0.9421	0.0042	4.5163	4.5205
133.2333	0.9616	0.0042	4.5308	4.535
133.2667	0.9833	0.0174	4.5465	4.5639



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
133.3	1.0043	0.0042	4.5663	4.5705
133.3333	1.0313	0.0042	4.5899	4.5941
133.3667	1.0481	0.0174	4.611	4.6283
133.4	1.0725	0.0174	4.6307	4.6481
133.4333	1.0939	0.0174	4.6557	4.673
133.4667	1.1166	0.0174	4.6807	4.698
133.5	1.1377	0.0174	4.703	4.7204
133.5333	1.1551	0.0174	4.7346	4.7519
133.5667	1.1758	0	4.7609	4.7609
133.6	1.193	0.0174	4.7832	4.8006
133.6333	1.2107	0.0305	4.8122	4.8427
133.6667	1.2282	0	4.845	4.845
133.7	1.246	0.0174	4.8779	4.8953
133.7333	1.2614	0.0174	4.9095	4.9268
133.7667	1.2779	0.0305	4.9397	4.9702
133.8	1.293	0.0174	4.9818	4.9992
133.8333	1.3062	0.0174	5.0147	5.032
133.8667	1.3207	0.0174	5.0449	5.0623
133.9	1.3345	0.0174	5.0831	5.1004
133.9333	1.3493	0.0174	5.1133	5.1307
133.9667	1.3622	0.0174	5.1501	5.1675
134	1.377	0.0042	5.1961	5.2004
134.0333	1.3882	0.0174	5.2224	5.2398
134.0667	1.401	0.0042	5.2619	5.2661
134.1	1.4109	0.0042	5.2987	5.3029
134.1333	1.4207	0	5.3382	5.3382
134.1667	1.4326	0.0305	5.3684	5.3989
134.2	1.4398	0.0174	5.4026	5.42
134.2333	1.4444	0.0042	5.4381	5.4423
134.2667	1.45	0.0042	5.4749	5.4791
134.3	1.454	0.0305	5.5091	5.5396
134.3333	1.4579	0.0174	5.5486	5.5659
134.3667	1.4655	0.0174	5.5749	5.5922
134.4	1.4678	0.0174	5.6051	5.6225
134.4333	1.4668	0.0174	5.6367	5.654
134.4667	1.4642	0.0305	5.6814	5.7119
134.5	1.4619	0.0305	5.6998	5.7303
134.5333	1.4606	0.0437	5.7208	5.7645
134.5667	1.4556	0.0042	5.7603	5.7645
134.6	1.4563	0.0305	5.7826	5.8131
134.6333	1.4566	0.0042	5.8102	5.8144
134.6667	1.4553	0.0174	5.8379	5.8552
134.7	1.4556	0.0305	5.8589	5.8894



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Time	Ch 1 dP	Ch 2 High Flow		Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
134.7333	1.457	0.0042	5.8905	5.8947
134.7667	1.4583	0.0042	5.9181	5.9223
134.7667	1.4586	0.0174	5.9378	5.9551
134.8333	1.4612	0.0174	5.9628	5.9801
134.8667	1.4609	0.0174	5.9904	6.0077
134.9	1.4606	0.0042	6.0127	6.017
134.9333	1.4668	0.0042	6.0417	6.0459
134.9667	1.4655	0.0305	6.0653	6.0958
135	1.4517	0.0174	6.0969	6.1143
135.0333	1.4467	0.0174	6.114	6.1314
135.0667	1.4487	0.0305	6.1377	6.1682
135.1	1.4514	0.0174	6.16	6.1774
135.1333	1.45	0.0174	6.1863	6.2037
135.1667	1.4461	0.0437	6.2034	6.2471
135.2	1.4461	0.0042	6.2271	6.2313
135.2333	1.4484	0.0174	6.2455	6.2629
135.2667	1.4431	0.0174	6.2718	6.2892
135.3	1.4421	0.0042	6.2928	6.297
135.3333	1.4435	0.0174	6.3086	6.326
135.3667	1.4438	0.0042	6.3336	6.3378
135.4	1.4431	0.0042	6.3402	6.3444
135.4333	1.4402	0.0174	6.3546	6.372
135.4667	1.4435	0.0042	6.3836	6.3878
135.5	1.4405	0.0174	6.3967	6.4141
135.5333	1.4421	0.0042	6.4256	6.4299
135.5667	1.4435	0.0174	6.4296	6.4469
135.6	1.4382	0.0174	6.4638	6.4811
135.6333	1.4405	0.0174	6.4822	6.4995
135.6667	1.4392	0.0305	6.4953	6.5258
135.7	1.4372	0.0174	6.5059	6.5232
135.7333	1.4359	0.0042	6.5295	6.5337
135.7667	1.4362	0.0174	6.5427	6.56
135.8	1.4369	0.0437	6.5677	6.6113
135.8333	1.4365	0.0174	6.5887	6.6061
135.8667	1.4342	0.0174	6.6084	6.6258
135.9	1.4352	0.0174	6.615	6.6324
135.9333	1.4326	0.0174	6.6321	6.6495
135.9667	1.4346	0	6.636	6.636
136	1.4333	0.0042	6.6558	6.66
136.0333	1.4339	0.0042	6.6676	6.6718
136.0667	1.4333	0.0042	6.69	6.6942
136.1	1.43	0.0042	6.7084	6.7126
136.1333	1.4316	0.0174	6.7189	6.7362



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
136.1667	1.4293	0.0305	6.7412	6.7717
136.2	1.4286	0.0305	6.7596	6.7902
136.2333	1.4319	0.0174	6.7702	6.7875
136.2667	1.4313	0	6.7859	6.7859
136.3	1.4323	0.0042	6.7938	6.798
136.3333	1.4313	0.0305	6.8149	6.8454
136.3667	1.4313	0.0042	6.832	6.8362
136.4	1.427	0	6.8451	6.8451
136.4333	1.4283	0.0042	6.8688	6.873
136.4667	1.4254	0.0174	6.8767	6.894
136.5	1.4273	0.0174	6.8846	6.9019
136.5333	1.428	0.0042	6.9004	6.9046
136.5667	1.427	0.0042	6.9188	6.923
136.6	1.4263	0.0305	6.9293	6.9598
136.6333	1.4267	0.0174	6.9411	6.9585
136.6667	1.4313	0	6.9543	6.9543
136.7	1.4273	0.0305	6.9622	6.9927
136.7333	1.4277	0.0042	6.9714	6.9756
136.7667	1.4273	0.0174	6.995	7.0124
136.8	1.4277	0.0042	7.0069	7.0111
136.8333	1.4296	0.0174	7.02	7.0374
136.8667	1.4316	0.0174	7.0371	7.0545
136.9	1.4316	0.0042	7.0516	7.0558
136.9333	1.4303	0.0042	7.0634	7.0676
136.9667	1.4313	0.0174	7.0739	7.0913
137	1.4306	0.0174	7.0871	7.1044
137.0333	1.4346	0.0042	7.095	7.0992
137.0667	1.4329	0.0174	7.1107	7.1281
137.1	1.4359	0.0174	7.1239	7.1413
137.1333	1.4319	0.0174	7.1318	7.1491
137.1667	1.4372	0.0042	7.1449	7.1491
137.2	1.4365	0.0042	7.1515	7.1557
137.2333	1.4365	0.0174	7.1699	7.1873
137.2667	1.4392	0	7.1791	7.1791
137.3	1.4379	0.0042	7.1949	7.1991
137.3333	1.4339	0	7.2133	7.2133
137.3667	1.4359	0.0042	7.2199	7.2241
137.4	1.4365	0.0174	7.2344	7.2517
137.4333	1.4421	0.0042	7.2514	7.2557
137.4667	1.4395	0.0042	7.258	7.2622
137.5	1.4425	0.0042	7.2633	7.2675
137.5333	1.4392	0.0174	7.2791	7.2964
137.5667	1.4438	0.0174	7.2922	7.3096



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Time	Ch 1 dP	•	Ch 3 Low Flow	
(min)	(psi)	(LPM)	(LPM)	(LPM)
137.6	1.4431	0.0174	7.3014	7.3188
137.6333	1.4418	0.0174	7.3133	7.3175
137.6667	1.4415	0.0042	7.329	7.3332
137.7	1.4438	0.0305	7.329	7.3595
137.7333	1.4448	0.0303	7.3474	7.3516
137.7667	1.4448	0.0042	7.3606	7.3648
137.7667	1.4444	0.0305	7.3606	7.3911
137.8333	1.4467	0.0303	7.3724	7.3898
137.8667	1.4474	0.0174	7.3882	7.4056
137.8667	1.4474	0.0174	7.3908	7.4082
137.9333	1.4467	0.0174	7.3895	7.4082
137.9667	1.4477	0.0042	7.4171	7.3337
137.9667	1.4464	0.0174	7.4171	7.41/1
138.0333	1.4481	0.0174	7.4263	7.4345
138.0667	1.4454	0.0042	7.4263	7.4568
138.1	1.4458	0.0174	7.4461	7.4508
138.1333	1.4481	0.0174	7.4645	7.4687
138.1667	1.4477	0.0042	7.4643	7.4792
138.1667	1.4477	0.0042	7.473	7.4792
138.2333	1.451	0.0042	7.4868	7.5042
138.2667	1.4514	0.0174	7.496	7.5042
138.2667	1.4514	0.0042	7.5079	7.5121
138.3333	1.4527	0.0305	7.5236	7.5542
138.3667	1.4517	0.0303	7.5289	7.5342
138.3667	1.4543	0.0042	7.5289	7.5581
138.4333	1.4543	0.0174	7.5513	7.5555
138.4667	1.453	0.0042	7.5565	7.5607
138.4667	1.453	0.0042	7.565	7.5713
138.5333	1.454	0.0174	7.5762	7.5936
138.5667	1.4563	0.0174	7.5841	7.6015
138.6	1.4563	0.0174	7.5986	7.6028
138.6333	1.4563	0.0042	7.6131	7.6173
138.6667	1.4565	0.0042	7.6157	7.6199
138.7	1.4543	0.0042	7.6144	7.6186
138.7333	1.4545	0.0042	7.6341	7.6515
138.7667	1.4553	0.0174	7.642	7.6725
138.8	1.4553	0.0303	7.6459	7.6633
138.8333	1.4596	0.0174	7.6486	7.6486
138.8667				
138.8667	1.4556 1.4563	0.0174 0.0174	7.6657 7.6749	7.683 7.6922
138.9	1.4596	0.0174	7.6749	7.6922
138.9333	1.4596			
138.9667	1.4586	0.0042 0.0305	7.6867	7.6909 7.729
139	1.4609	0.0305	7.6985	7.729



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
(111111)	(psi)	(LFIVI)	(LFIVI)	(LFIVI)
139.0333	1.4606	0.0042	7.6972	7.7014
139.0667	1.4599	0.0042	7.7104	7.7146
139.1	1.4606	0.0174	7.7143	7.7317
139.1333	1.4622	0.0042	7.7156	7.7198
139.1667	1.4602	0.0042	7.734	7.7383
139.2	1.4616	0.0174	7.7393	7.7567
139.2333	1.4629	0.0042	7.7446	7.7488
139.2667	1.4616	0.0305	7.7498	7.7803
139.3	1.4616	0.0305	7.7564	7.7869
139.3333	1.4632	0.0305	7.759	7.7895
139.3667	1.4632	0.0174	7.7656	7.783
139.4	1.4652	0.0305	7.7682	7.7987
139.4333	1.4635	0.0042	7.7761	7.7803
139.4667	1.4642	0.0174	7.7788	7.7961
139.5	1.4668	0.0042	7.7866	7.7909
139.5333	1.4662	0.0305	7.7919	7.8224
139.5667	1.4652	0	7.7985	7.7985
139.6	1.4675	0.0042	7.8116	7.8158
139.6333	1.4695	0.0042	7.8169	7.8211
139.6667	1.4675	0.0042	7.8287	7.8329
139.7	1.4668	0.0042	7.8314	7.8356
139.7333	1.4655	0.0174	7.8458	7.8632
139.7667	1.4681	0.0174	7.8419	7.8592
139.8	1.4688	0.0042	7.8524	7.8566
139.8333	1.4695	0.0042	7.8603	7.8645
139.8667	1.4563	0.0042	7.8695	7.8737
139.9	1.4461	0.0042	7.8655	7.8697
139.9333	1.4484	0.0042	7.8695	7.8737
139.9667	1.45	0	7.88	7.88
140	1.4491	0.0174	7.8761	7.8934
140.0333	1.4491	0.0042	7.8787	7.8829
140.0667	1.4523	0.0174	7.8826	7.9
140.1	1.454	0.0305	7.8918	7.9223
140.1333	1.4543	0.0174	7.8905	7.9079
140.1667	1.4517	0.0174	7.8932	7.9105
140.2	1.4523	0.0305	7.8945	7.925
140.2333	1.454	0.0305	7.901	7.9316
140.2667	1.4507	0.0305	7.8984	7.9289
140.3	1.4546	0.0174	7.901	7.9184
140.3333	1.4546	0.0174	7.905	7.9223
140.3667	1.4514	0.0042	7.9155	7.9197
140.4	1.4576	0.0174	7.9234	7.9408
140.4333	1.456	0	7.9234	7.9234



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Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
140.4667	1.4556	0.0042	7.9247	7.9289
140.5	1.457	0.0174	7.926	7.9434
140.5333	1.455	0.0174	7.9195	7.9368
140.5667	1.4573	0.0174	7.9431	7.9605
140.6	1.4602	0.0174	7.9444	7.9618
140.6333	1.4599	0.0042	7.9523	7.9565
140.6667	1.4593	0.0174	7.9536	7.971
140.7	1.4612	0.0174	7.9523	7.9697
140.7333	1.4579	0.0174	7.9615	7.9789
140.7667	1.4629	0.0174	7.9813	7.9986
140.8	1.4599	0.0042	7.9694	7.9736
140.8333	1.4583	0.0042	7.9813	7.9855
140.8667	1.4599	0.0042	7.9826	7.9868
140.9	1.4619	0.0174	7.9918	8.0091
140.9333	1.4606	0.0042	7.9891	7.9934
140.9667	1.4619	0.0042	7.9944	7.9986
141	1.4619	0.0174	7.9957	8.0131
141.0333	1.4642	0.0042	8.0076	8.0118
141.0667	1.4658	0.0174	8.0023	8.0197
141.1	1.4642	0.0042	8.0128	8.017
141.1333	1.4645	0.0042	8.0194	8.0236
141.1667	1.4645	0.0042	8.0233	8.0275
141.2	1.4642	0.0042	8.0299	8.0341
141.2333	1.4665	0.0042	8.0312	8.0354
141.2667	1.4655	0.0042	8.0431	8.0473
141.3	1.4635	0.0042	8.0431	8.0473
141.3333	1.4672	0.0174	8.047	8.0644
141.3667	1.4658	0.0174	8.0496	8.067
141.4	1.4652	0.0174	8.0523	8.0696
141.4333	1.4675	0.0042	8.0562	8.0604
141.4667	1.4658	0.0174	8.0707	8.088
141.5	1.4681	0.0042	8.0746	8.0788
141.5333	1.4685	0.0305	8.0759	8.1064
141.5667	1.4649	0.0174	8.0707	8.088
141.6	1.4698	0.0305	8.0838	8.1143
141.6333	1.4642	0.0174	8.0773	8.0946
141.6667	1.4698	0.0174	8.0891	8.1064
141.7	1.4655	0.0174	8.0904	8.1078
141.7333	1.4668	0.0174	8.0996	8.117
141.7667	1.4658	0.0174	8.0983	8.1157
141.8	1.4665	0	8.1009	8.1009
141.8333	1.4672	0.0174	8.1022	8.1196
141.8667	1.4678	0.0174	8.0983	8.1157



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
141.9	1.4681	0.0174	8.1128	8.1301
141.9333	1.4675	0.0174	8.1141	8.1314
141.9667	1.4668	0.0042	8.1075	8.1117
142	1.4685	0.0042	8.1062	8.1104
142.0333	1.4675	0.0042	8.1128	8.117
142.0667	1.4642	0	8.1141	8.1141
142.1	1.4589	0.0174	8.1154	8.1327
142.1333	1.4537	0.0174	8.1272	8.1446
142.1667	1.4517	0.0042	8.1259	8.1301
142.2	1.453	0.0174	8.1351	8.1525
142.2333	1.4415	0.0174	8.1285	8.1459
142.2667	1.4408	0.0042	8.1259	8.1301
142.3	1.4418	0.0042	8.1391	8.1433
142.3333	1.4385	0.0174	8.1338	8.1512
142.3667	1.4425	0.0042	8.1338	8.138
142.4	1.4408	0.0174	8.1364	8.1538
142.4333	1.4395	0.0305	8.1391	8.1696
142.4667	1.4395	0.0042	8.1391	8.1433
142.5	1.4379	0.0042	8.1522	8.1564
142.5333	1.4382	0.0042	8.1496	8.1538
142.5667	1.4346	0.0042	8.1548	8.159
142.6	1.4349	0.0305	8.1469	8.1775
142.6333	1.4346	0	8.1456	8.1456
142.6667	1.4333	0.0305	8.1548	8.1853
142.7	1.4362	0.0042	8.1562	8.1604
142.7333	1.4313	0.0174	8.1562	8.1735
142.7667	1.4316	0.0174	8.1614	8.1788
142.8	1.4309	0.0437	8.1654	8.209
142.8333	1.43	0	8.1509	8.1509
142.8667	1.4283	0.0042	8.1654	8.1696
142.9	1.427	0.0174	8.1693	8.1867
142.9333	1.428	0.0174	8.1614	8.1788
142.9667	1.4254	0.0174	8.1627	8.1801
143	1.4234	0.0174	8.1627	8.1801
143.0333	1.4257	0.0174	8.1588	8.1761
143.0667	1.4247	0.0042	8.1548	8.159
143.1	1.425	0.0042	8.1614	8.1656
143.1333	1.4237	0.0042	8.1601	8.1643
143.1667	1.4211	0.0174	8.1614	8.1788
143.2	1.4207	0.0042	8.1706	8.1748
143.2333	1.4211	0.0042	8.1548	8.159
143.2667	1.4188	0.0174	8.1562	8.1735
143.3	1.4171	0.0174	8.1496	8.1669



Project No. G101276459SAT-019

Time (min)	Ch 1 dP	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow
(11111)	(1231)	(LI IVI)	(LI IVI)	(LI IVI)
143.3333	1.4184	0.0305	8.1588	8.1893
143.3667	1.4175	0.0174	8.1522	8.1696
143.4	1.4198	0.0042	8.1548	8.159
143.4333	1.4175	0.0174	8.1614	8.1788
143.4667	1.4181	0.0042	8.1575	8.1617
143.5	1.4168	0.0174	8.1654	8.1827
143.5333	1.4158	0.0042	8.1601	8.1643
143.5667	1.4135	0.0042	8.164	8.1682
143.6	1.4165	0.0174	8.1627	8.1801
143.6333	1.4171	0.0174	8.1627	8.1801
143.6667	1.4155	0.0042	8.1627	8.1669
143.7	1.4151	0.0174	8.1719	8.1893
143.7333	1.4151	0.0174	8.1693	8.1867
143.7667	1.4161	0.0042	8.1614	8.1656
143.8	1.4165	0.0042	8.1719	8.1761
143.8333	1.4119	0.0042	8.1772	8.1814
143.8667	1.4148	0.0042	8.1693	8.1735
143.9	1.4148	0.0174	8.1719	8.1893
143.9333	1.4145	0.0174	8.168	8.1853
143.9667	1.4145	0.0174	8.1732	8.1906
144	1.4142	0.0437	8.1667	8.2103
144.0333	1.4138	0.0174	8.1667	8.184
144.0667	1.4175	0.0174	8.168	8.1853
144.1	1.4161	0.0042	8.1667	8.1709
144.1333	1.4165	0.0174	8.1732	8.1906
144.1667	1.4155	0.0174	8.1706	8.188
144.2	1.4165	0	8.1732	8.1732
144.2333	1.4151	0.0174	8.1667	8.184
144.2667	1.4165	0.0042	8.168	8.1722
144.3	1.4198	0.0042	8.1746	8.1788
144.3333	1.4158	0.0305	8.1654	8.1959
144.3667	1.4132	0.0305	8.1706	8.2011
144.4	1.4171	0.0042	8.1746	8.1788
144.4333	1.4184	0.0174	8.1732	8.1906
144.4667	1.4198	0.0042	8.1825	8.1867
144.5	1.4184	0.0042	8.1811	8.1853
144.5333	1.4188	0.0042	8.1811	8.1853
144.5667	1.4191	0.0042	8.1759	8.1801
144.6 144.6333	1.4188 1.4184	0.0174 0.0042	8.1903 8.189	8.2077 8.1932
144.6667	1.4194	0.0305	8.1877	8.2182
144.7	1.4211	0.0174	8.1864	8.2038
144.7333	1.4198	0.0174	8.193	8.2103



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
144.7667	1.4178	0.0437	8.1917	8.2353
144.8	1.4221	0.0305	8.193	8.2235
144.8333	1.423	0.0042	8.193	8.1972
144.8667	1.4211	0.0174	8.1969	8.2143
144.9	1.4224	0.0174	8.2009	8.2182
144.9333	1.4234	0.0174	8.1982	8.2156
144.9667	1.4194	0.0174	8.1982	8.2156
145	1.4201	0.0174	8.2022	8.2195
145.0333	1.4244	0.0174	8.2061	8.2235
145.0667	1.4224	0.0174	8.2009	8.2182
145.1	1.423	0.0174	8.1982	8.2156
145.1333	1.4227	0.0174	8.2035	8.2208
145.1667	1.423	0.0174	8.2088	8.2261
145.2	1.424	0.0042	8.1995	8.2038
145.2333	1.4247	0.0174	8.2088	8.2261
145.2667	1.424	0.0174	8.2074	8.2248
145.3	1.4267	0.0042	8.2127	8.2169
145.3333	1.4237	0.0305	8.2127	8.2432
145.3667	1.4224	0.0174	8.2166	8.234
145.4	1.4234	0.0042	8.2088	8.213
145.4333	1.426	0.0174	8.2127	8.2301
145.4667	1.425	0.0042	8.2245	8.2287
145.5	1.4263	0.0042	8.218	8.2222
145.5333	1.4254	0.0174	8.218	8.2353
145.5667	1.4267	0.0174	8.2193	8.2366
145.6	1.428	0.0042	8.2127	8.2169
145.6333	1.4277	0.0042	8.218	8.2222
145.6667	1.4293	0.0174	8.2206	8.2379
145.7	1.4263	0.0042	8.2298	8.234
145.7333	1.4267	0.0174	8.2298	8.2471
145.7667	1.4273	0.0174	8.239	8.2564
145.8	1.4273	0.0042	8.235	8.2393
145.8333	1.4283	0.0042	8.2469	8.2511
145.8667	1.4277	0	8.2548	8.2548
145.9	1.4309	0.0174	8.2508	8.2682
145.9333	1.4293	0.0042	8.2456	8.2498
145.9667	1.4286	0.0174	8.2613	8.2787
146	1.4293	0.0042	8.2482	8.2524
146.0333	1.4257	0.0174	8.2574	8.2748
146.0667	1.4293	0.0174	8.2587	8.2761
146.1	1.43	0.0174	8.2548	8.2721
146.1333	1.4303	0.0174	8.26	8.2774
146.1667	1.4319	0.0174	8.2561	8.2734



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
,				
146.2	1.4326	0.0174	8.2706	8.2879
146.2333	1.4346	0.0042	8.2666	8.2708
146.2667	1.4352	0.0042	8.2574	8.2616
146.3	1.4329	0	8.2627	8.2627
146.3333	1.4349	0.0174	8.2784	8.2958
146.3667	1.4342	0.0174	8.2732	8.2905
146.4	1.4362	0.0042	8.2666	8.2708
146.4333	1.4333	0.0174	8.2732	8.2905
146.4667	1.4375	0.0042	8.2745	8.2787
146.5	1.4372	0.0174	8.2784	8.2958
146.5333	1.4352	0.0042	8.2706	8.2748
146.5667	1.4352	0.0042	8.2771	8.2813
146.6	1.4379	0.0042	8.2758	8.28
146.6333	1.4352	0.0305	8.2706	8.3011
146.6667	1.4379	0.0174	8.2824	8.2997
146.7	1.4385	0.0305	8.2811	8.3116
146.7333	1.4379	0.0042	8.2863	8.2905
146.7667	1.4372	0.0042	8.2811	8.2853
146.8	1.4402	0.0174	8.2824	8.2997
146.8333	1.4356	0.0174	8.2837	8.3011
146.8667	1.4382	0.0174	8.2784	8.2958
146.9	1.4402	0.0042	8.2903	8.2945
146.9333	1.4431	0.0042	8.2929	8.2971
146.9667	1.4402	0.0174	8.2955	8.3129
147	1.4425	0.0174	8.2942	8.3116
147.0333	1.4425	0.0042	8.2969	8.3011
147.0667	1.4421	0.0174	8.2916	8.309
147.1	1.4418	0.0042	8.289	8.2932
147.1333	1.4405	0.0042	8.2942	8.2984
147.1667	1.4418	0.0174	8.2982	8.3155
147.2	1.4405	0.0042	8.2955	8.2997
147.2333	1.4425	0.0174	8.3074	8.3247
147.2667	1.4431	0.0042	8.3034	8.3076
147.3	1.4431	0.0174	8.2995	8.3168
147.3333	1.4448	0.0042	8.3008	8.305
147.3667	1.4451	0.0042	8.3047	8.309
147.4	1.4425	0.0042	8.3074	8.3116
147.4333	1.4481	0.0042	8.3087	8.3129
147.4667	1.4448	0.0174	8.3192	8.3366
147.5	1.4448	0.0042	8.3087	8.3129
147.5333	1.4471	0.0042	8.3153	8.3195
147.5667	1.4481	0.0174	8.3061	8.3234
147.6	1.4441	0	8.3218	8.3218



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Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
147.6333	1.4467	0.0042	8.3258	8.33
147.6667	1.4448	0.0174	8.3205	8.3379
147.7	1.4448	0.0042	8.3074	8.3116
147.7333	1.4494	0.0174	8.3113	8.3287
147.7667	1.45	0.0042	8.3205	8.3247
147.8	1.45	0.0042	8.3179	8.3221
147.8333	1.451	0	8.3232	8.3232
147.8667	1.4484	0.0174	8.31	8.3274
147.9	1.4497	0.0042	8.3205	8.3247
147.9333	1.451	0.0305	8.3218	8.3523
147.9667	1.4514	0.0174	8.3166	8.3339
148	1.4514	0.0174	8.3205	8.3379
148.0333	1.4494	0.0174	8.3179	8.3353
148.0667	1.4504	0.0174	8.3218	8.3392
148.1	1.4504	0.0174	8.3271	8.3445
148.1333	1.4497	0.0042	8.3284	8.3326
148.1667	1.4533	0.0174	8.3284	8.3458
148.2	1.4507	0.0305	8.3363	8.3668
148.2333	1.451	0.0305	8.3389	8.3694
148.2667	1.4517	0.0042	8.3481	8.3523
148.3	1.4514	0.0042	8.3389	8.3431
148.3333	1.4543	0	8.3389	8.3389
148.3667	1.4523	0.0042	8.3402	8.3445
148.4	1.4507	0.0042	8.3442	8.3484
148.4333	1.454	0.0174	8.3481	8.3655
148.4667	1.453	0.0042	8.3416	8.3458
148.5	1.4553	0.0305	8.3402	8.3708
148.5333	1.4573	0.0174	8.3416	8.3589
148.5667	1.454	0.0174	8.3402	8.3576
148.6	1.4563	0.0042	8.3547	8.3589
148.6333	1.4543	0.0174	8.3508	8.3681
148.6667	1.455	0.0174	8.3442	8.3616
148.7	1.4563	0.0174	8.3495	8.3668
148.7333	1.4566	0.0174	8.3547	8.3721
148.7667	1.4573	0.0305	8.3547	8.3852
148.8	1.4553	0.0042	8.3521	8.3563
148.8333	1.4573	0.0174	8.3587	8.376
148.8667	1.4563	0.0042	8.3534	8.3576
148.9	1.4533	0.0174	8.3613	8.3786
148.9333	1.456	0.0305	8.3626	8.3931
148.9667	1.457	0	8.3573	8.3573
149	1.4556	0.0042	8.3679	8.3721
149.0333	1.456	0.0174	8.3718	8.3892



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
(111111)	(psi)	(LPIVI)	(LFIVI)	(LPIVI)
149.0667	1.4563	0.0174	8.3639	8.3813
149.1	1.4556	0.0042	8.3718	8.376
149.1333	1.457	0.0174	8.3758	8.3931
149.1667	1.4596	0.0042	8.381	8.3852
149.2	1.457	0.0042	8.3731	8.3773
149.2333	1.4579	0.0042	8.3784	8.3826
149.2667	1.456	0.0042	8.3758	8.38
149.3	1.4589	0.0174	8.3771	8.3944
149.3333	1.4602	0.0042	8.3863	8.3905
149.3667	1.4583	0.0174	8.3784	8.3957
149.4	1.4606	0.0042	8.3863	8.3905
149.4333	1.457	0.0174	8.3942	8.4115
149.4667	1.4593	0	8.3928	8.3928
149.5	1.4589	0.0174	8.3928	8.4102
149.5333	1.4606	0.0042	8.3915	8.3957
149.5667	1.4612	0.0042	8.385	8.3892
149.6	1.4586	0.0174	8.406	8.4234
149.6333	1.4576	0.0042	8.3955	8.3997
149.6667	1.4616	0.0042	8.406	8.4102
149.7	1.4596	0.0042	8.3955	8.3997
149.7333	1.4583	0.0042	8.4021	8.4063
149.7667	1.4602	0.0042	8.4007	8.4049
149.8	1.4606	0.0042	8.4021	8.4063
149.8333	1.4639	0.0174	8.4073	8.4247
149.8667	1.4602	0.0042	8.4113	8.4155
149.9	1.4635	0.0174	8.4139	8.4312
149.9333	1.4602	0.0174	8.4073	8.4247
149.9667	1.4635	0.0042	8.4126	8.4168
150	1.4652	0.0174	8.4152	8.4326
150.0333	1.4606	0.0305	8.4099	8.4404
150.0667	1.4645	0.0174	8.4178	8.4352
150.1	1.4612	0.0042	8.4218	8.426
150.1333	1.4642	0.0042	8.4191	8.4234
150.1667	1.4645	0.0174	8.4126	8.4299
150.2	1.4622	0.0174	8.4139	8.4312
150.2333	1.4593	0.0042	8.4205	8.4247
150.2667	1.4596	0.0042	8.4231	8.4273
150.3	1.4639	0.0174	8.4205	8.4378
150.3333	1.4635	0.0174	8.4205	8.4378
150.3667	1.4622	0.0042	8.4231	8.4273
150.4	1.4642	0.0305	8.4257	8.4562
150.4333	1.4652	0.0305	8.4152	8.4457
150.4667	1.4652	0.0042	8.4231	8.4273



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
150.5	1.4616	0.0042	8.431	8.4352
150.5333	1.4616	0.0042	8.4297	8.4339
150.5667	1.4655	0.0174	8.431	8.4483
150.6	1.4625	0.0174	8.4376	8.4549
150.6333	1.4632	0.0042	8.4297	8.4339
150.6667	1.4639	0.0174	8.4323	8.4497
150.7	1.4619	0.0174	8.4362	8.4536
150.7333	1.4655	0.0042	8.427	8.4312
150.7667	1.4612	0.0042	8.431	8.4352
150.8	1.4639	0.0042	8.4389	8.4431
150.8333	1.4625	0.0174	8.4323	8.4497
150.8667	1.4655	0.0042	8.4389	8.4431
150.9	1.4632	0.0174	8.4362	8.4536
150.9333	1.4655	0.0305	8.4494	8.4799
150.9667	1.4658	0.0042	8.4349	8.4391
151	1.4632	0.0042	8.4389	8.4431
151.0333	1.4662	0.0042	8.4323	8.4365
151.0667	1.4655	0.0042	8.4349	8.4391
151.1	1.4635	0.0174	8.4362	8.4536
151.1333	1.4619	0.0174	8.4323	8.4497
151.1667	1.4602	0.0042	8.4402	8.4444
151.2	1.4658	0.0305	8.4336	8.4641
151.2333	1.4635	0.0437	8.4284	8.472
151.2667	1.4635	0.0042	8.4389	8.4431
151.3	1.4649	0.0174	8.4362	8.4536
151.3333	1.4606	0.0042	8.431	8.4352
151.3667	1.4629	0.0305	8.4349	8.4654
151.4	1.4609	0.0042	8.4349	8.4391
151.4333	1.4645	0.0042	8.4376	8.4418
151.4667	1.4645	0.0042	8.4323	8.4365
151.5	1.4616	0.0174	8.4389	8.4562
151.5333	1.4622	0.0305	8.4454	8.476
151.5667	1.4622	0.0174	8.4362	8.4536
151.6	1.4606	0.0305	8.4323	8.4628
151.6333	1.4642	0.0042	8.4362	8.4404
151.6667	1.4632	0.0305	8.4389	8.4694
151.7	1.4599	0	8.4415	8.4415
151.7333	1.4622	0.0042	8.4454	8.4497
151.7667	1.4616	0.0174	8.4494	8.4667
151.8	1.4589	0.0305	8.4441	8.4746
151.8333	1.4616	0.0305	8.4441	8.4746
151.8667	1.4635	0.0042	8.4454	8.4497
151.9	1.4632	0.0042	8.452	8.4562



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
151.9333	1.4609	0.0174	8.4507	8.4681
151.9667	1.4619	0.0042	8.452	8.4562
152	1.4632	0.0305	8.4533	8.4838
152.0333	1.4616	0.0042	8.4428	8.447
152.0667	1.4629	0.0042	8.4547	8.4589
152.1	1.4616	0.0174	8.4599	8.4773
152.1333	1.4635	0.0174	8.4573	8.4746
152.1667	1.4632	0.0174	8.4586	8.476
152.2	1.4461	0.0042	8.452	8.4562
152.2333	1.4435	0.0174	8.4665	8.4838
152.2667	1.4441	0.0174	8.4652	8.4825
152.3	1.4441	0.0042	8.4704	8.4746
152.3333	1.4428	0.0174	8.4612	8.4786
152.3667	1.4421	0.0174	8.4757	8.493
152.4	1.4461	0.0174	8.456	8.4733
152.4333	1.4448	0.0174	8.4665	8.4838
152.4667	1.4481	0.0174	8.4533	8.4707
152.5	1.4448	0.0042	8.452	8.4562
152.5333	1.4471	0.0174	8.4652	8.4825
152.5667	1.4458	0.0174	8.4481	8.4654
152.6	1.4477	0.0174	8.4599	8.4773
152.6333	1.4514	0.0305	8.452	8.4825
152.6667	1.4461	0	8.452	8.452
152.7	1.4451	0.0042	8.4494	8.4536
152.7333	1.4484	0.0174	8.4573	8.4746
152.7667	1.4484	0.0042	8.4481	8.4523
152.8	1.45	0.0042	8.4533	8.4575
152.8333	1.4504	0.0174	8.4428	8.4602
152.8667	1.4504	0.0174	8.4639	8.4812
152.9	1.452	0.0174	8.4547	8.472
152.9333	1.4494	0	8.456	8.456
152.9667	1.4537	0.0042	8.452	8.4562
153	1.4514	0.0174	8.4547	8.472
153.0333	1.4543	0.0042	8.4494	8.4536
153.0667	1.4543	0.0174	8.4533	8.4707
153.1	1.4537	0.0174	8.452	8.4694
153.1333	1.4507	0.0042	8.4547	8.4589
153.1667	1.4537	0.0174	8.452	8.4694
153.2	1.4504	0.0305	8.4625	8.493
153.2333	1.4543	0.0174	8.4573	8.4746
153.2667	1.453	0.0174	8.4533	8.4707
153.3	1.4546	0.0042	8.456	8.4602
153.3333	1.452	0.0042	8.456	8.4602



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
153.3667	1.4546	0.0174	8.4639	8.4812
153.4	1.454	0.0042	8.4507	8.4549
153.4333	1.4563	0.0042	8.456	8.4602
153.4667	1.457	0.0174	8.4639	8.4812
153.5	1.455	0.0174	8.4586	8.476
153.5333	1.4553	0.0174	8.4547	8.472
153.5667	1.4566	0.0305	8.4652	8.4957
153.6	1.4596	0.0042	8.4625	8.4667
153.6333	1.4583	0.0042	8.456	8.4602
153.6667	1.4563	0.0174	8.4704	8.4878
153.7	1.4576	0.0174	8.4507	8.4681
153.7333	1.4596	0.0042	8.4586	8.4628
153.7667	1.4579	0.0042	8.456	8.4602
153.8	1.4579	0.0174	8.4573	8.4746
153.8333	1.4576	0.0305	8.4573	8.4878
153.8667	1.4563	0.0305	8.4665	8.497
153.9	1.457	0.0042	8.4625	8.4667
153.9333	1.4583	0.0174	8.4652	8.4825
153.9667	1.4596	0.0174	8.4639	8.4812
154	1.4602	0.0042	8.4704	8.4746
154.0333	1.4563	0.0174	8.4639	8.4812
154.0667	1.4602	0.0174	8.4612	8.4786
154.1	1.4625	0.0042	8.4625	8.4667
154.1333	1.4606	0.0174	8.4652	8.4825
154.1667	1.4625	0.0042	8.4639	8.4681
154.2	1.4589	0.0305	8.4744	8.5049
154.2333	1.4602	0.0042	8.4704	8.4746
154.2667	1.4612	0.0174	8.4678	8.4852
154.3	1.4589	0.0174	8.4665	8.4838
154.3333	1.4612	0.0042	8.4652	8.4694
154.3667	1.4622	0.0174	8.4678	8.4852
154.4	1.4599	0.0174	8.4783	8.4957
154.4333	1.4609	0.0174	8.4704	8.4878
154.4667	1.4606	0.0174	8.4704	8.4878
154.5	1.4606	0.0174	8.4678	8.4852
154.5333	1.4606	0.0174	8.4678	8.4852
154.5667	1.4622	0.0042	8.4599	8.4641
154.6	1.4602	0.0042	8.4652	8.4694
154.6333	1.4589	0.0174	8.4704	8.4878
154.6667	1.4606	0.0305	8.4783	8.5088
154.7	1.4625	0.0042	8.4704	8.4746
154.7333	1.4602	0.0042	8.4731	8.4773
154.7667	1.4619	0.0174	8.4704	8.4878



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
154.8	1.4622	0.0042	8.4717	8.476
154.8333	1.4599	0.0174	8.4639	8.4812
154.8667	1.4622	0.0042	8.4625	8.4667
154.9	1.4639	0.0042	8.4547	8.4589
154.9333	1.4609	0.0174	8.4704	8.4878
154.9667	1.4645	0.0305	8.4678	8.4983
155	1.4619	0.0042	8.4691	8.4733
155.0333	1.4612	0.0042	8.4665	8.4707
155.0667	1.4622	0.0042	8.4665	8.4707
155.1	1.4622	0.0042	8.4704	8.4746
155.1333	1.4612	0.0174	8.4665	8.4838
155.1667	1.4619	0.0042	8.4704	8.4746
155.2	1.4616	0.0174	8.4678	8.4852
155.2333	1.4632	0.0174	8.4704	8.4878
155.2667	1.4645	0.0174	8.4731	8.4904
155.3	1.4639	0.0174	8.4691	8.4865
155.3333	1.4665	0.0042	8.4612	8.4654
155.3667	1.4649	0.0174	8.4678	8.4852
155.4	1.4642	0.0042	8.4757	8.4799
155.4333	1.4629	0.0042	8.4757	8.4799
155.4667	1.4662	0.0042	8.4731	8.4773
155.5	1.4632	0.0042	8.4639	8.4681
155.5333	1.4609	0.0042	8.4731	8.4773
155.5667	1.4649	0.0042	8.4691	8.4733
155.6	1.4642	0.0042	8.4586	8.4628
155.6333	1.4612	0.0174	8.4704	8.4878
155.6667	1.4625	0.0174	8.4704	8.4878
155.7	1.4658	0.0042	8.4744	8.4786
155.7333	1.4612	0.0174	8.4665	8.4838
155.7667	1.4642	0.0174	8.477	8.4944
155.8	1.4612	0.0042	8.4639	8.4681
155.8333	1.4619	0.0042	8.4704	8.4746
155.8667	1.4655	0.0174	8.481	8.4983
155.9	1.4639	0.0042	8.4625	8.4667
155.9333	1.4645	0.0042	8.4665	8.4707
155.9667	1.4635	0.0174	8.4731	8.4904
156	1.4616	0.0174	8.4691	8.4865
156.0333	1.4655	0.0174	8.477	8.4944
156.0667	1.4649	0.0174	8.4783	8.4957
156.1	1.4629	0.0042	8.4678	8.472
156.1333	1.4639	0.0042	8.4717	8.476
156.1667	1.4625	0.0174	8.477	8.4944
156.2	1.4645	0.0042	8.4744	8.4786



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
156.2333	1.4642	0.0174	8.481	8.4983
156.2667	1.4632	0.0042	8.4783	8.4825
156.3	1.4642	0.0042	8.4823	8.4865
156.3333	1.4649	0.0174	8.4757	8.493
156.3667	1.4655	0.0174	8.4731	8.4904
156.4	1.4642	0.0305	8.4757	8.5062
156.4333	1.4655	0.0042	8.4704	8.4746
156.4667	1.4655	0.0305	8.4823	8.5128
156.5	1.4632	0.0042	8.4836	8.4878
156.5333	1.4464	0.0174	8.4849	8.5023
156.5667	1.4382	0.0042	8.4731	8.4773
156.6	1.4408	0.0174	8.4678	8.4852
156.6333	1.4444	0.0042	8.4704	8.4746
156.6667	1.4435	0.0174	8.4783	8.4957
156.7	1.4435	0.0042	8.4757	8.4799
156.7333	1.4461	0.0042	8.4652	8.4694
156.7667	1.4431	0.0042	8.4744	8.4786
156.8	1.4471	0.0042	8.4678	8.472
156.8333	1.4487	0.0042	8.4704	8.4746
156.8667	1.4467	0.0305	8.4665	8.497
156.9	1.4467	0.0042	8.4625	8.4667
156.9333	1.4481	0.0174	8.4652	8.4825
156.9667	1.4458	0.0174	8.4652	8.4825
157	1.4474	0.0042	8.4533	8.4575
157.0333	1.4484	0.0042	8.4599	8.4641
157.0667	1.4533	0.0042	8.4586	8.4628
157.1	1.4514	0.0042	8.4665	8.4707
157.1333	1.4504	0.0174	8.4586	8.476
157.1667	1.4504	0.0174	8.4625	8.4799
157.2	1.4507	0.0174	8.4678	8.4852
157.2333	1.4533	0.0174	8.4625	8.4799
157.2667	1.4504	0.0174	8.4599	8.4773
157.3	1.4504	0.0042	8.456	8.4602
157.3333	1.4546	0.0174	8.4665	8.4838
157.3667	1.4543	0.0042	8.4612	8.4654
157.4	1.4566	0.0042	8.4573	8.4615
157.4333	1.453	0.0174	8.4547	8.472
157.4667	1.4566	0.0305	8.4652	8.4957
157.5	1.4579	0.0174	8.4639	8.4812
157.5333	1.457	0.0042	8.4481	8.4523
157.5667	1.4533	0.0174	8.4599	8.4773
157.6	1.4553	0.0305	8.4639	8.4944
157.6333	1.4573	0.0042	8.452	8.4562



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Time	Ch 1 dP	Ch 2 High Flow		Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
157.0007	1 4500	0.0174	0.4572	8.4746
157.6667 157.7	1.4593 1.4556	0.0174	8.4573 8.4573	8.4878
157.7333	1.4602	0.0042	8.4625	8.4667
157.7667	1.4576	0.0042	8.4625	8.4667
157.7667	1.4606	0.0042	8.4507	8.4549
157.8333	1.4599	0.0174	8.4533	8.4707
157.8667	1.4599	0.0174	8.456	8.4733
157.8007	1.4606	0.0174	8.4599	8.4773
157.9333	1.4583	0.0174	8.4573	8.4746
157.9667	1.4612	0.0042	8.4533	8.4575
157.3007	1.4619	0.0042	8.4612	8.4654
158.0333	1.4619	0.0174	8.4639	8.4812
158.0667	1.4566	0.0174	8.4665	8.4707
158.1	1.4619	0.0305	8.4652	8.4957
158.1333	1.4602	0.0042	8.4652	8.4694
158.1667	1.4616	0.0174	8.4625	8.4799
158.2	1.4625	0.0174	8.4652	8.4825
158.2333	1.4606	0.0174	8.4652	8.4652
158.2667	1.4586	0.0305	8.4652	8.4957
158.3	1.4616	0.0042	8.4573	8.4615
158.3333	1.4616	0.0042	8.4652	8.4652
158.3667	1.4606	0.0042	8.4612	8.4654
158.4	1.4629	0.0174	8.4625	8.4799
158.4333	1.4622	0.0042	8.4599	8.4641
158.4667	1.4632	0.0042	8.4652	8.4694
158.5	1.4609	0.0042	8.4665	8.4707
158.5333	1.4625	0.0174	8,4533	8,4707
158.5667	1.4642	0.0174	8.4533	8.4707
158.6	1.4639	0.0174	8.4704	8.4878
158.6333	1.4632	0.0042	8.4704	8.4746
158.6667	1.4619	0.0174	8.477	8.4944
158.7	1.4632	0.0174	8.4678	8.4852
158.7333	1.4672	0.0042	8.4704	8.4746
158.7667	1.4655	0.0174	8.4599	8.4773
158.8	1.4658	0	8.4612	8.4612
158.8333	1.4645	0.0174	8.4612	8.4786
158.8667	1.4609	0.0437	8.4717	8.5154
158.9	1.4672	0.0174	8.481	8.4983
158.9333	1.4672	0.0174	8.4704	8.4878
158.9667	1.4655	0.0042	8.4744	8.4786
159	1.4652	0.0174	8.4717	8.4891
159.0333	1.4649	0.0042	8.4717	8.476
159.0667	1.4639	0.0174	8.4691	8.4865



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
,				
159.1	1.4619	0.0305	8.4744	8.5049
159.1333	1.4563	0.0042	8.4678	8.472
159.1667	1.4477	0.0042	8.4704	8.4746
159.2	1.4444	0.0174	8.4652	8.4825
159.2333	1.4471	0.0174	8.4704	8.4878
159.2667	1.4425	0.0174	8.4625	8.4799
159.3	1.4448	0.0042	8.4678	8.472
159.3333	1.4474	0.0174	8.4665	8.4838
159.3667	1.4444	0.0042	8.4639	8.4681
159.4	1.4474	0.0174	8.4612	8.4786
159.4333	1.4474	0.0174	8.4704	8.4878
159.4667	1.4481	0.0042	8.4612	8.4654
159.5	1.4481	0.0042	8.4678	8.472
159.5333	1.4491	0.0174	8.4599	8.4773
159.5667	1.4477	0.0174	8.4691	8.4865
159.6	1.4474	0.0174	8.4678	8.4852
159.6333	1.4484	0.0042	8.452	8.4562
159.6667	1.4527	0.0042	8.4599	8.4641
159.7	1.452	0.0174	8.4547	8.472
159.7333	1.4494	0.0042	8.4547	8.4589
159.7667	1.451	0.0174	8.4586	8.476
159.8	1.4527	0.0042	8.4612	8.4654
159.8333	1.4507	0.0305	8.4665	8.497
159.8667	1.453	0.0042	8.4494	8.4536
159.9	1.4517	0.0042	8.456	8.4602
159.9333	1.4514	0.0042	8.4652	8.4694
159.9667	1.4514	0.0042	8.4639	8.4681
160	1.4546	0.0174	8.4599	8.4773
160.0333	1.453	0.0042	8.4691	8.4733
160.0667	1.4527	0.0042	8.4494	8.4536
160.1	1.455	0.0042	8.4625	8.4667
160.1333	1.4546	0.0174	8.4612	8.4786
160.1667	1.4556	0.0042	8.4678	8.472
160.2	1.4563	0.0174	8.4573	8.4746
160.2333	1.455	0.0305	8.4625	8.493
160.2667	1.4537	0.0042	8.4717	8.476
160.3	1.455	0.0042	8.4599	8.4641
160.3333	1.4556	0.0042	8.4652	8.4694
160.3667	1.457	0.0042	8.4625	8.4667
160.4	1.4573	0.0042	8.4639	8.4681
160.4333	1.456	0.0305	8.4586	8.4891
160.4667	1.4583	0.0305	8.4599	8.4904
160.5	1.4586	0.0174	8.4704	8.4878



Project No. G101276459SAT-019

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
160.5333	1.4586	0.0174	8.4599	8.4773
160.55667	1.457	0.0174	8.4625	8.493
160.6	1.4583	0.0042	8.4612	8.4654
160.6333	1.4593	0.0042	8.4599	8.4641
160.6667	1.4593	0.0042		8.4641
			8.4639	
160.7	1.4576	0.0042	8.4652	8.4694
160.7333	1.4583	0.0174	8.4704	8.4878
160.7667	1.4596	0.0174	8.4599	8.4773
160.8	1.4579	0.0174	8.4639	8.4812
160.8333	1.4566	0.0042	8.4547	8.4589
160.8667	1.4586	0.0174	8.4612	8.4786
160.9	1.4566	0.0042	8.4612	8.4654
160.9333	1.4593	0.0042	8.4612	8.4654
160.9667	1.4606	0.0305	8.4573	8.4878
161	1.4606	0.0174	8.4625	8.4799
161.0333	1.4586	0.0305	8.4652	8.4957
161.0667	1.4609	0.0174	8.4704	8.4878
161.1	1.4589	0.0174	8.4757	8.493
161.1333	1.4602	0.0042	8.4704	8.4746
161.1667	1.4593	0.0174	8.4717	8.4891
161.2	1.4602	0.0174	8.4678	8.4852
161.2333	1.4576	0.0174	8.4704	8.4878
161.2667	1.4596	0.0042	8.4599	8.4641
161.3	1.4609	0.0042	8.4731	8.4773
161.3333	1.4609	0.0174	8.4704	8.4878
161.3667	1.4619	0.0042	8.4704	8.4746
161.4	1.4586	0.0174	8.4678	8.4852
161.4333	1.4609	0.0042	8.4704	8.4746
161.4667	1.4629	0.0042	8.4652	8.4694
161.5	1.4602	0.0174	8.4731	8.4904
161.5333	1.4602	0.0042	8.4744	8.4786
161.5667	1.4602	0.0305	8.4757	8.5062
161.6	1.4645	0.0042	8.477	8.4812
161.6333	1.4599	0.0174	8.477	8.4944
161.6667	1.4622	0.0174	8.4704	8.4878
161.7	1.4652	0.0174	8.4757	8.493
161.7333	1.4602	0.0042	8.477	8.4812
161.7667	1.4629	0.0437	8.4836	8.5272
161.8	1.4635	0.0174	8.481	8.4983
161.8333	1.4619	0.0174	8.477	8.4944
161.8667	1.4596	0.0174	8.4836	8.5009
161.9	1.4629	0.0305	8.477	8.5075
161.9333	1.4635	0.0174	8.4862	8.5036



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
161.9667	1.4658	0.0305	8.4875	8.518
162	1.4602	0.0305	8.4849	8.5154
162.0333	1.4668	0.0042	8.4849	8.4891
162.0667	1.4612	0.0174	8.4823	8.4996
162.1	1.4642	0.0174	8.4902	8.5075
162.1333	1.4639	0.0042	8.4783	8.4825
162.1667	1.4635	0.0305	8.4875	8.518
162.2	1.4635	0.0042	8.4849	8.4891
162.2333	1.4658	0	8.4875	8.4875
162.2667	1.4662	0.0174	8.4915	8.5088
162.3	1.4639	0.0174	8.481	8.4983
162.3333	1.4662	0.0042	8.4862	8.4904
162.3667	1.4622	0.0042	8.4954	8.4996
162.4	1.4629	0.0305	8.4941	8.5246
162.4333	1.4609	0.0042	8.4823	8.4865
162.4667	1.4655	0.0042	8.4862	8.4904
162.5	1.4629	0.0042	8.4941	8.4983
162.5333	1.4658	0.0174	8.4862	8.5036
162.5667	1.4652	0.0042	8.4888	8.493
162.6	1.4645	0.0042	8.4915	8.4957
162.6333	1.4672	0.0174	8.4862	8.5036
162.6667	1.4645	0.0174	8.4967	8.5141
162.7	1.4662	0.0042	8.4888	8.493
162.7333	1.4662	0.0174	8.4902	8.5075
162.7667	1.4635	0.0042	8.4941	8.4983
162.8	1.4655	0.0042	8.4928	8.497
162.8333	1.4658	0.0042	8.4862	8.4904
162.8667	1.4649	0.0174	8.4915	8.5088
162.9	1.4662	0.0042	8.498	8.5023
162.9333	1.4658	0.0305	8.4915	8.522
162.9667	1.4658	0.0042	8.4928	8.497
163	1.4642	0.0174	8.502	8.5193
163.0333	1.4622	0.0174	8.502	8.5193
163.0667	1.4642	0.0174	8.4915	8.5088
163.1	1.4649	0.0042	8.5072	8.5115
163.1333	1.4642	0.0305	8.5072	8.5378
163.1667	1.4662	0.0174	8.5033	8.5207
163.2	1.4658	0.0042	8.5046	8.5088
163.2333	1.4652	0.0042	8.5059	8.5101
163.2667	1.4672	0.0042	8.5151	8.5193
163.3	1.4649	0.0174	8.5086	8.5259
163.3333	1.4658	0.0305	8.5151	8.5456
163.3667	1.4649	0.0174	8.5178	8.5351



Project No. G101276459SAT-019

Time	Ch 1 dP	Ch 2 High Flow	Ch 3 Low Flow	Total Flow
(min)	(psi)	(LPM)	(LPM)	(LPM)
163.4	1.4619	0.0174	8.5086	8.5259
163.4333	1.4658	0.0305	8.5072	8.5378
163.4667	1.4665	0.0174	8.5046	8.522
163.5	1.4649	0.0042	8.5125	8.5167
163.5333	1.4652	0.0174	8.5125	8.5299
163.5667	1.4658	0.0174	8.5099	8.5272
163.6	1.4662	0.0174	8.5072	8.5246
163.6333	1.4658	0.0174	8.5125	8.5299
163.6667	1.4639	0.0042	8.5086	8.5128
163.7	1.4668	0.0042	8.5125	8.5167
163.7333	1.4675	0.0042	8.5086	8.5128
163.7667	1.4662	0.0305	8.5099	8.5404
163.8	1.4642	0.0042	8.5099	8.5141
163.8333	1.4668	0.0305	8.5125	8.543
163.8667	1.4635	0.0305	8.5072	8.5378
163.9	1.4668	0.0042	8.5138	8.518
163.9333	1.4645	0.0042	8.5059	8.5101
163.9667	1.4681	0.0305	8.5178	8.5483
164	1.4668	0.0174	8.5072	8.5246
164.0333	1.4685	0.0042	8.5086	8.5128
164.0667	1.4665	0.0042	8.5059	8.5101
164.1	1.4662	0.0174	8.5046	8.522
164.1333	1.4655	0.0042	8.5125	8.5167
164.1667	1.4675	0.0174	8.5125	8.5299
164.2	1.4649	0.0042	8.5191	8.5233
164.2333	1.4652	0.0174	8.5191	8.5364
164.2667	1.4668	0.0042	8.5059	8.5101
164.3	1.4665	0.0305	8.5151	8.5456
164.3333	1.4685	0.0174	8.5125	8.5299
164.3667	1.4645	0.0174	8.5178	8.5351
164.4	1.4665	0.0042	8.523	8.5272
164.4333	1.4655	0.0174	8.5217	8.5391
164.4667	1.4649	0.0042	8.5204	8.5246
164.5	1.4675	0.0042	8.5191	8.5233
164.5333	1.4645	0.0042	8.5243	8.5286
164.5667	1.4639	0.0174	8.5165	8.5338
164.6	1.4685	0.0042	8.527	8.5312
164.6333	1.4655	0.0042	8.523	8.5272
164.6667	1.4665	0.0174	8.5178	8.5351
164.7	1.4652	0	8.527	8.527
164.7333	1.4691	0.0174	8.5178	8.5351
164.7667	1.4685	0.0042	8.5257	8.5299
164.8	1.4665	0.0305	8.5257	8.5562



Areva NP Inc. Project No. G101276459SAT-019 February 12, 2014

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
164.8333	1.4672	0.0305	8.5243	8.5549
164.8667	1.4655	0.0042	8.5257	8.5299
164.9	1.4662	0.0174	8.5309	8.5483
164.9333	1.4645	0.0042	8.523	8.5272
164.9667	1.4625	0.0174	8.5191	8.5364
165	1.4523	0.0174	8.5178	8.5351



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APPENDIX C Photographs





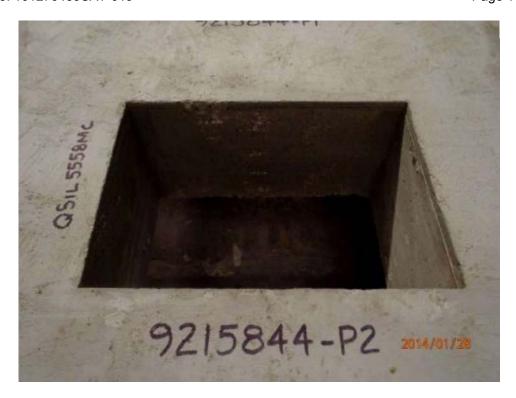








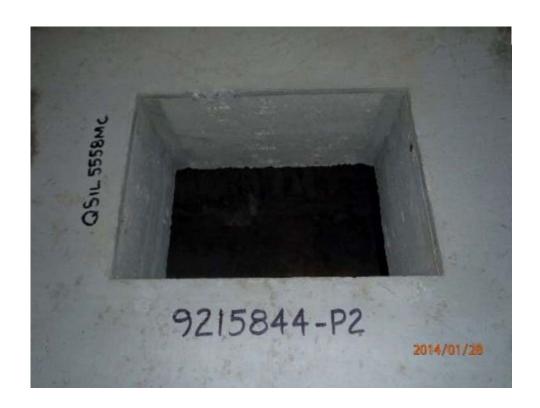






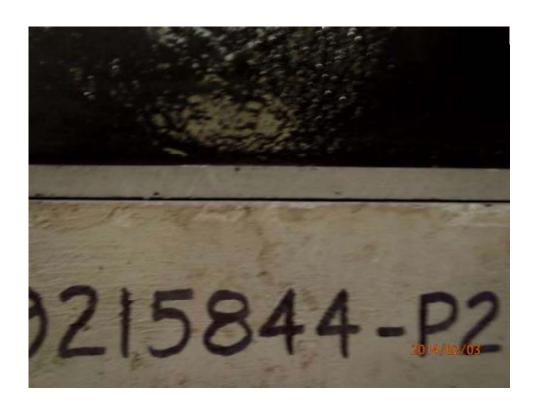














































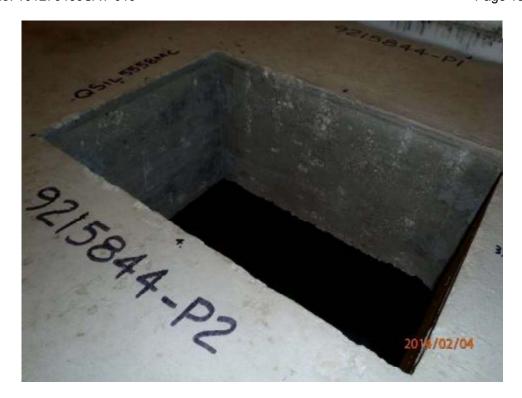


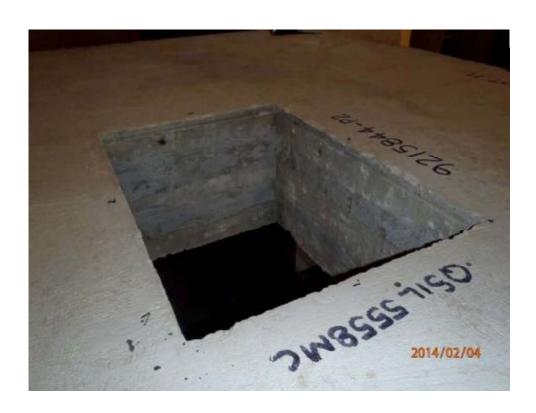










































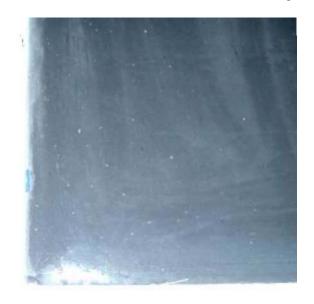












2014/02/10















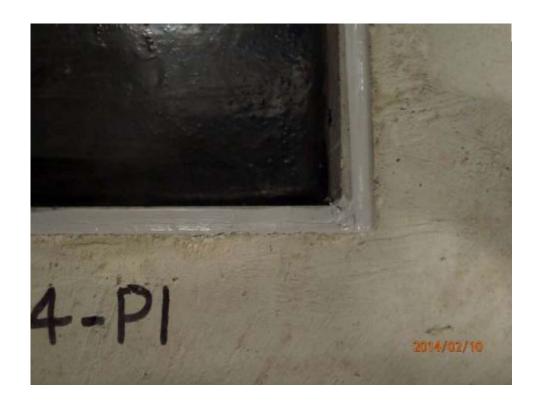




























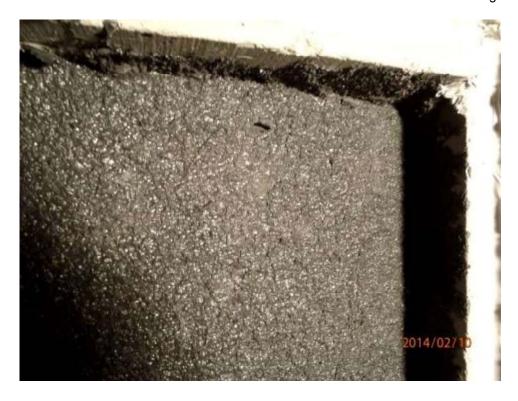


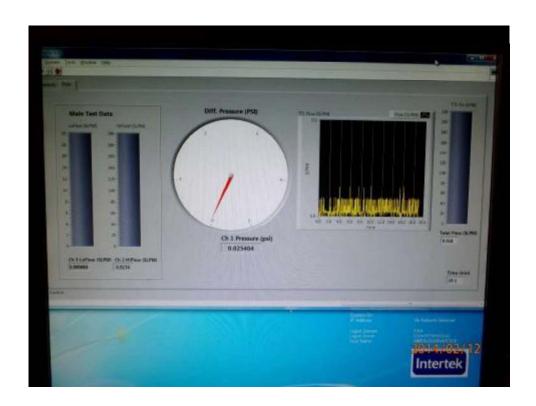






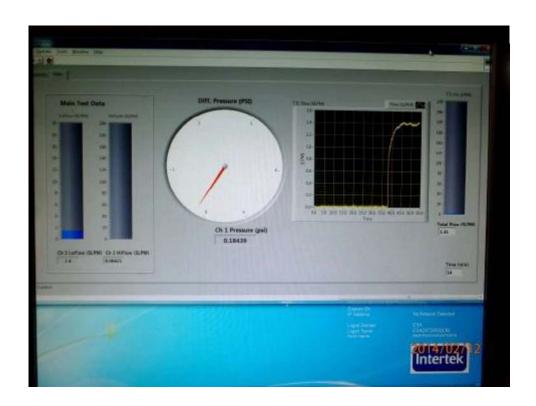




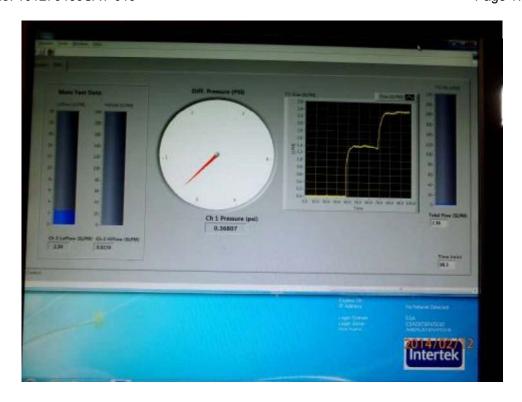


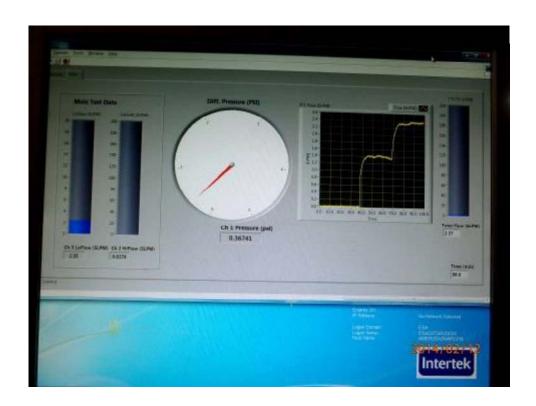






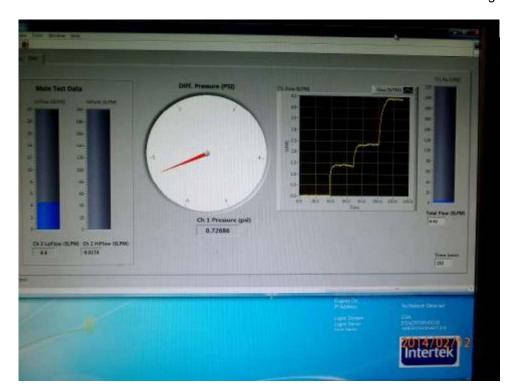








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APPENDIX D Test Plan



Controlled Document



20004-020 (10/21/2013)

AREVA NP Inc.

Engineering Information Record

Document No.: 51 - 9215844 - 000

Detailed Test Plan for Conducting MOX Pressure Test 11



Mike Dey Staff Engineer



Michael A. Brown Quality Supervisor

Page 1 of 30



Detailed Test Plan for Conducting MOX Pressure Test 11 Safety Related? YES NO Does this document establish design or technical requirements? YES NO Does this document contain assumptions requiring verification? YES NO Does this document contain Customer Required Format? YES NO Signature Block Name and Title/Discipline Signature P/LP, R/LR, A-CRF, A Date Prepared/Reviewed/ Approved or Comments Princ Des Eng Spec II / P2YFI-A Detrick Risner Cangineer I / P2YFI-A Resett Groesbeck Manager Tech Ops / P2YFI-A Note: P/LP designates Propert of Customer Required Format (A-CRF) A designates Reviewer (R), Lead Reviewer (LR) A-CRF designates Project Manager Approver of Customer Required Format (A-CRF) A designates Approver/RTM - Verification of Reviewer Independence Project Manager Approval of Customer References (N/A if not applicable) Name (printed or typed) Signature Date	Λ.				200	04-020 (10/21/20
Detailed Test Plan for Conducting MOX Pressure Test 11 Safety Rolated? YES NO Does this document establish design or technical requirements? YES NO Does this document contain assumptions requiring verification? YES NO Does this document contain Customer Required Format? YES NO Does this document contain Customer Required Format? YES NO Signature Block Name and Title/Discipline Signature P/LP, R/LR, Date Prepared/Reviewed/Approved or Comments Princ Does Eng Spec II / PEYFI-A Derrick Risner Zagineer I/PEYFI-A Radineer I/PEYFI-A Radineer I/PEYFI-A Note: P/LP designates Preparer (P), Lead Preparer (LP) R/LR designates Reviewer (R), Lead Reviewer (LR) A-CRF designates Reviewer (R), Lead Reviewer (LR) A-CRF designates Preparer (P), Load Preparer (LP) R/LR designates Approver/RTM - Verification of Reviewer Independence Project Manager Approval of Customer References (N/A if not applicable) Name (printed or typed) (printed or typed) Project Manager Approval of Customer References (N/A if not applicable) Project Manager Approval of Customer References (N/A if not applicable) Project Manager Approval of Customer References (N/A if not applicable) Project Manager Approval of Customer References (N/A if not applicable) Project Manager Approval of Customer References (N/A if not applicable) Project Manager Approval of Customer References (N/A if not applicable)	AREVA					
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20004-020 (10/21/2013) Document No.: 51-9215844-000

Detailed Test Plan for Conducting MOX Pressure Test 11

Record of Revision

Revision No.	Pages/Sections/ Paragraphs Changed	Brief Description / Change Authorization
000	All	Initial Issue. This document contains the main body of the report (pages 1-18), Appendix A (3 pages), Appendix B (3 pages), Appendix C (4 pages), Appendix D (2 pages), for a total of 30 pages.

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ACRONYMS

ABC Alternate Building Construction
CGD Commercial Grade Dedication
CGI Commercial Grade Item

HVAC Heating Ventilation and Air Conditioning

IROFS Items Relied On For Safety

MOX Mixed Oxide

MFFF Mixed Oxide Fuel Fabrication Facility

QL Quality Level

SSC Structures, Systems and Components

UL Underwriters Laboratories, Inc.

w.g. Water Gauge

Penetration Seal Materials

DC-170 Dow Corning Sylgard® 170 Silicone Elastomer

QSil 5558MC Quantum Silicones QSil 5558MC Silicone Elastomer





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BACKGROUND

AREVA Inc. (AREVA) is assisting Shaw AREVA MOX Services (MOX Services) in the development and implementation of a penetration seal program for the Mixed Oxide Fuel Fabrication Facility (MFFF). One aspect of the MOX penetration seal program includes conducting various types of qualification tests of penetration seal assemblies to substantiate the performance capabilities of specific penetration seal designs. Pressure testing is one type of qualification testing that needs to be performed in order to demonstrate the pressure retaining capability of MOX penetration seal designs. The data collected during pressure testing is needed to determine acceptable levels of leakage to maintain the necessary pressure differentials between confinement zones within the MFFF under various conditions, such as normal operation or inadvertent clean agent discharge. Other types of qualification testing, such as fire testing and testing for seismic qualification of penetration seal assemblies, are addressed by other test plans.

1.0 PURPOSE

The purpose of this test plan is to define the test assembly, test methods and acceptance criteria for conducting pressure test in support of the MOX penetration seal program.

This test plan defines the test methods, acceptance criteria and test report documentation requirements for penetration seal Pressure Test 11. Additionally, this detailed test plan defines the roles and responsibilities of MOX Services, AREVA, the selected testing laboratory, and any other subcontracted entity engaged in support of pressure testing efforts.

This detailed test plan also describes the procurement plan for materials associated with penetration seal Pressure Test 11 and identifies the entities responsible for procuring the various components of the test assemblies based on the quality level assigned to each component.

This test plan also establishes minimum quality requirements for the penetration seal materials used in the test assemblies and links quality requirements in the AREVA QA program to customer/project quality requirements.

2.0 OBJECTIVE

The objective of this test plan is:

 Evaluate the pressure resistance capability of elastomer penetration seals for the sealing of openings in alternate building construction (ABC) walls at air pressure increments above atmospheric pressure provided in Section 9.2.

The primary construction material used in the MOX facility is MOX-Crete, a special concrete blend mixed and installed on site. Penetration seal designs have been developed and tested in concrete applications for use in the MOX facility. In addition, MOX uses a type of alternate building construction (ABC) for forming interior corridor walls and partitions. Penetration seal designs for damper closures and for fire ratings have been developed and tested, however, pressure ratings of elastomer seals in ABC walls has not been established.

MOX specific designs for ABC walls are provided on Drawing DCS01-BMF-DS-PLF-A-04509 Sheets 1-3 [Reference 12.1] and Drawing DCS01-BMF-DS-PLS-B-01692 [Reference 12.2]. However, this test is not intended to evaluate the pressure resistance capability of the ABC all, but rather the elastomer seal to Structo Crete material interface.

The specific configurations to be tested are described below. Critical characteristics and the associated limiting parameters that will be substantiated by a successful test are also provided.

2.1 Test Deck Description

The test deck will consist of a 12" thick concrete slab measuring approximately 96" x 96" (8' x 8') [Note: Final test slab size to be determined by Intertek and documented in the final test report]. Within this slab





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there will be two openings into which Structo Crete material will be fastened. The concrete openings will be 14" x 20" without beveled edges. Details for the two penetrations are provided in Section 2.2. The penetrations will be unlined (bare concrete). The test deck will be horizontally oriented with a hemispherical 72" diameter steel pressure vessel mounted on each side of the precast openings in the slab.

Additionally, most of the openings (penetrations) in the MOX facility have been cast with a ¾" bevel on both sides of the opening. For testing and qualification purposes, this feature is considered aesthetic, and it has no adverse effect on the functional performance of the penetration seal installation. In fact for some applications, such as in the case of pressure resistant penetrations seals, the bevel may provide a benefit over non-beveled openings. Therefore, for the purposes of the penetration seal test program, the bevel feature will only be included on penetrations where it has been deemed to have a potential negative impact on the penetration seal performance. As a result, for this test plan the ¾" bevel feature will not be utilized.

Drawings showing the general layout of the test deck (test slab) for this pressure test can be found in Appendix A.

2.2 Test Description

There is two openings in the test deck that will be filled with an ABC wall creating two penetrations to be sealed and tested in Pressure Test 11.

- Penetration P1 Test penetration P1 is a 14" x 20" concrete opening containing no penetrating items. Structo Crete panels will be installed within the opening as shown in Appendix B. Structo Crete panels are generally provided with one side smoother than the other (as a result of the manufacturing process). Two sides of the penetration will be lined with the smoother side of the Structo Crete panels facing the seal material and two sides with the smoother side facing away. This penetration will be sealed with an 8" depth of Dow Corning Sylgard® 170 Silicone Elastomer (DC-170) with no permanent damming.
- Penetration P2 Test penetration P1 is a 14" x 20" concrete opening containing no penetrating items. Structo Crete panels will be installed within the opening as shown in Appendix B. Structo Crete panels are generally provided with one side smoother than the other (as a result of the manufacturing process). Two sides of the penetration wil be lined with the smoother side of the Structo Crete panels facing the seal material and two sides with the smoother side facing away. This penetration will be sealed with a 8" depth of Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) with no permanent damming.

The Structo Crete and penetration seal materials will be located within the openings as shown in Appendix B. The test will be performed with the test deck oriented in the horizontal position and in accordance with Section 9.0.

2.3 Critical Characteristics and Limiting Parameters Being Tested

The specific critical characteristics and associated limiting parameters being tested for Pressure Test 11 are as follows.

This test will evaluate pressure resistance capabilities of silicone elastomer penetration seal materials installed in ABC walls where the elastomer interfaces with Structo-Crete panels. Note: Perimeter joints sealed using Dow Corning® 790 Silicone Building Sealant or other sealing materials are not within the scope of this test. A successful test will substantiate the acceptability of elastomer penetration seal material to function as a pressure seal when installed in an ABC wall regardless of penetration size and orientation. Specifically, the pressure resistance of elastomer penetration seal material (DC-170 and/or QSil 5558MC) to Structo-Crete interface.





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3.0 ACCEPTANCE CRITERIA

Pressure rated penetration seals at the MOX facility are required to remain "sufficiently leak-tight" at various pressure levels in order to support the functional goals of the various pressure rating requirements (i.e., confinement, suppression system clean agent concentration, fire induced pressure loads or HVAC pressure boundary loads). The term "sufficiently leak-tight" indicates that the penetration seal meets the predetermined acceptance criteria for the pressure level(s) being tested.

The acceptance criterion that constitutes "sufficiently leak-tight" varies based on the pressure requirement and the operating mode of the plant. For most pressure conditions and operating modes, "sufficiently leak-tight" means that the penetration seal assembly must remain in place but is allowed to leak (i.e., the penetration seal cannot become dislodged from the opening or otherwise catastrophically fail such that a substantial leakage path is created.)

Per MOX Services Calculation *Confinement Boundary Air Leakage Criteria* [Reference 12.11], penetration seals that function as confinement zone 3b boundary components must maintain a leakage rate less than 0.01 cfm/sq. ft. of penetration area when tested at a pressure that bounds C3b to non-C3b zone pressures during normal operating conditions.

Table 9-1 identifies the differential pressure levels (stages) for conducting pressure tests, as well as, the acceptance criteria in order to be considered "sufficiently leak-tight".

4.0 RESPONSIBILITIES

The following roles and responsibilities apply to this test plan.

4.1 MOX Services

- 4.1.1 Provide review and concurrence of this detailed pressure test plan.
- 4.1.2 Provide concurrence for any revisions made to this test plan during test specimen construction activities.
- 4.1.3 Provide some of the materials for test assembly construction from MOX Services surplus or scrap (if available).
- 4.1.4 Witness pressure tests if desired.

4.2 AREVA

- 4.2.1 Develop and revise (if necessary) this detailed pressure test plan.
- 4.2.2 Provide management and oversight of all aspects of the MOX penetration seal test program.
- 4.2.3 Select the pressure testing facility and establish sub-contract agreements. The testing laboratory selected for performance of this pressure test is Intertek Testing Services NA, Inc., Elmendorf, TX
- 4.2.4 Provide engineering instructions to the testing laboratory for performance of the test including test parameters, acceptance criteria, requirements for documenting the test results in a final test report, etc.
- 4.2.5 Procure all primary penetration seal materials, devices and components (i.e., any materials, devices and components intended to replicate future Safety Related (QL-1) designs to be installed in the MOX facility) as designated in the procurement plan section (Section 5.0) of this test plan.





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- 4.2.6 Notify MOX Services at least 10 days prior to test date to facilitate MOX Services decision to witness the pressure test.
- 4.2.7 Witness pressure test.
- 4.2.8 Perform post-test examinations.
- 4.2.9 Review, approve and issue final test reports.

4.3 Testing Laboratory (Intertek Testing Services NA, Inc.)

- 4.3.1 Notify AREVA at least 5 days prior to the start of test assembly construction activities.
- 4.3.2 Construct test decks in accordance with this test plan and AREVA direction.
- 4.3.3 Procure test deck materials and any other test assembly components identified under the Testing Laboratory scope in the procurement plan section (Section 5.0) of this test plan.
- 4.3.4 Procure testing equipment necessary for pressure testing services in accordance with this test plan and verify that the testing equipment is properly calibrated.
- 4.3.5 Provide pressure testing services in accordance with this test plan.
- 4.3.6 Assist AREVA, as necessary, in conducting detailed post-test destructive examinations of the test assemblies.
- 4.3.7 Dispose of test assemblies upon completion of the pressure tests.
- 4.3.8 Generate final test reports in accordance with test plan requirements (Section 11.0).

4.4 Other Subcontracted Entities

There are no other Subcontractors for this pressure test plan.

5.0 PROCUREMENT PLAN

This penetration seal pressure test plan involves many elements beyond the penetration seal material being qualified. Some of these elements include the test deck or test slab, various fasteners for securing laboratory instrumentation to the test assembly, etc. Not all elements of the test assembly are required to be procured to the same quality level as the penetration seal material, which must be capable of satisfying the quality requirements of the end product (i.e., QL-1 qualified penetration seal assemblies for plant applications). The following procurement plan takes into consideration the required quality level of the various materials required for these penetration seal pressure tests and prescribes an approach for material procurement which considers cost, schedule and quality requirements.

5.1 Penetration Seal Materials

The vast majority of penetration seals that will be installed throughout the MFFF are designated QL-1. MOX Services defines QL-1 in PP9-1, SSC Quality Levels & Marking Design Documents [Reference 12.3] as follows:

QL-1 SSCs are typically IROFS (all IROFS are QL-1 and may be either SSCs or Administrative Controls) credited in the Integrated Safety Analysis with a required function to prevent or mitigate design basis events such that high-consequence events are made highly unlikely; intermediate-consequence events are made unlikely; or to prevent criticality. For example, the failure of an IROFS item could cause:

- Loss of a primary confinement feature leading to release of material resulting in exceeding 10CFR70.61 performance requirements;
- 2. Failure to satisfy the double contingency principle for the prevention of a criticality accident; or





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3. Loss of other safety function required to meet 10CFR70.61 performance requirements.

This definition correlates with the following definition of "Nuclear Safety Related" in AREVA Administrative Procedure (AP) 1702-25, Assignment of Nuclear Safety Classification to Products and Services [Reference 12.4]:

Definition of "Nuclear Safety Related"

Company products and services are considered to be nuclear safety related if they involve the evaluation, specification, design or change in design, operation, or performance of structures, systems, and components which must function directly, or must support other systems which function, to ensure any of the following:

- · The integrity of the reactor coolant pressure boundary
- The capability to shut down the reactor and maintain it in a safe shutdown condition
- The capability to prevent or mitigate the consequences of accidents which could result in potential
 offsite radiation exposures greater than accepted limits.

On this basis, permanent penetration seal materials used in this test program shall be procured by AREVA or supplied by MOX Services and suitably base-lined so that future procurements of the same commercial materials can undergo the commercial grade dedication process in support of Nuclear Safety Related (i.e., MOX QL-1) plant installations. Only the primary seal materials specified as a part of the final seal design and which are left in place during testing become an integral part of the seal assembly and need to be base-lined for future dedication of similarly procured materials.

The quality level of the penetration seal materials procured for this test plan is Non-Safety.

Note: Commercial Grade Dedication (CGD) must be performed for Commercial Grade Items (CGIs) used in Safety Related applications when procured from suppliers where specific quality controls for nuclear applications cannot be imposed in a practical manner in accordance with 56-9141754-001, AREVA NP Inc. Quality Assurance Program [Reference 12.5]. However, none of the seal materials to be procured and used in the test program are intended or approved for installation in the MOX facility. Therefore, CGD of penetration seal materials used for test purposes is not required.

For this pressure test, the following materials shall be procured by AREVA and base-lined for future dedication activities.

- 1. Dow Corning Sylgard® 170 Silicone Elastomer (DC-170)
- 2. Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC)

5.2 Test Deck/Test Slab

The test deck will be used to simulate a confinement zone or HVAC boundary in which the penetration seal assemblies may be installed. The test deck is not considered an integral part of the penetration seal assembly being tested and therefore is not intended to replicate MOX-specific plant conditions and not considered integral in bounding the performance of the penetration seal assemblies (e.g., concrete blend, compressive strength, rebar size and spacing). The test deck will be comprised of normal weight reinforced concrete.

The openings cast into the test deck will simulate certain features consistent with MOX penetrations (e.g., painted or coated interior finishes, beveled edges, etc.) as defined by the test plan drawings contained in Appendix A.

The testing laboratory shall be responsible for procuring all materials and components associated with the construction of the test deck, unless otherwise specified below. The test deck shall comply with the requirements of the approved test plan drawings contained in Appendix A, and in accordance with the testing facility's Quality Assurance Program.

The quality level of the test deck is Non-safety.





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5.3 Penetrating Items

There are no penetrating items (e.g., conduits, cable trays and wire ways) associated with this pressure test.

6.0 SPECIAL PRECAUTIONS

6.1 Precautions for Construction of Test Assemblies

Observe testing facilities safe work practices for construction, lifting, and moving of test assemblies.

6.2 Precautions for Installation of Seal Assemblies

Observe specific precautions recommended by seal material manufacturers as noted on product literature and material safety data sheets contained in AREVA Inc. Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program* [Reference 12.6].

6.3 Precautions for Conducting Pressure Tests

Proper safety precautions shall be exercised to preclude personnel from direct exposure to loss of pressure events, unexpected disengaging of testing equipment from the test deck, and all other related hazards.

7.0 PREREQUISITES

7.1 General Test Configuration Requirements

The test assembly, the slab layout and penetration seal configurations shall be as specified by AREVA and in accordance with the drawings and information contained in Appendix A of this test plan, and AREVA Inc. Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program* [Reference 12.6].

7.2 Safety Related Materials

Penetration seal materials that are purchased **Non-Safety** for this test program but are to be base-lined for future Nuclear Safety Related via the Commercial Grade Dedication process are indicated on the AREVA Bill of Materials (Appendix C.1).

7.3 Dimensioned Drawings

All test articles shall conform to the dimensioned drawings supplied by AREVA and contained in Appendix A & Appendix B of this test plan. Any differences between designed and constructed/tested assemblies shall be noted in final drawings contained within the test report.

7.4 Test Configuration

All test articles shall be securely fastened to the test apparatus by the laboratory. All openings shall be sealed in accordance with test plan instructions, drawings (Appendix A & Appendix B) and AREVA Document 01-9198306 [Reference 12.6].





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8.0 TEST ASSEMBLY CONSTRUCTION

8.1 Test Slab Construction

The Testing Laboratory shall construct the test slab, including location and size of openings and placement of penetrating items, in accordance with the drawings contained in Appendix A of this Test Plan.

AREVA quality control representative (or approved designee) shall conduct an inspection of the test slab for compliance with the approved Test Plan drawings prior to installation of individual penetration seal test assemblies. Any differences between the approved Test Plan drawings and the as-built test slab configuration shall be corrected (if deemed necessary by the ARVEA Test Engineer) or noted by the QC Inspector (if correction is not required). Completion of this verification shall be documented as required by AREVA Inc. Document 01-9198306, Installation Instruction Manual for MOX Penetration Seal Test Program [Reference 12.6].

8.2 Penetration Seal Installation

AREVA (or approved designee) shall install the penetration seal test assemblies in accordance with the drawings contained in Appendix A of this Test Plan and in accordance with AREVA Inc. Document 01-9198306, Installation Instruction Manual for MOX Penetration Seal Test Program [Reference 12.6].

QA/QC verification of penetration seal installations shall be documented as required by AREVA Inc. Document 01-9198306, Installation Instruction Manual for MOX Penetration Seal Test Program [Reference 12.6]. For the purposes of this test plan, the "seal assemblies" requiring QA/QC verification under 01-9198306 are limited to the installations of Dow Corning Sylgard® 170 Silicone Elastomer (DC-170) and Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC).

8.3 Pre-Test Verifications

Prior to conducting the pressure test for each test assembly, the AREVA Test Engineer shall sign-off indicating that the test article (test penetration) is complete and ready for testing as required by AREVA Inc. Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program* [Reference 12.6].

9.0 PROCEDURE

9.1 Pressure Test Apparatus

The pressure test apparatus to be used for this pressure test shall be constructed and maintained by the testing laboratory. Two hemispherical 72" diameter steel pressure vessels shall be used to construct the assembly. One side shall be used to induce the testing pressures above atmospheric pressure based on Table 9-1, while the other side shall measure the pressure increase or "leakage" through the penetration. The test apparatus shall be "leak-tight" and substantial enough to withstand the pressures created for test purposes. Attachment shall be sufficient to withstand the forces imposed on the pressure vessels during the test.

9.2 Process

The anticipated differential pressures, as they apply to MFFF penetration seal designs, are discussed in DCS01-BRA-DS-TRD-B-01365-0 [Reference 12.7]. Depending upon its location in the plant, a penetration seal may be subjected to differential pressures from one or more of the following sources:

- · Clean agent suppression system discharge (inadvertent or in response to a fire)
- · Normal HVAC operation in support of facility confinement zone separation
- · Fire induced pressure





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Detailed Test Plan for Conducting MOX Pressure Test 11

· HVAC pressure boundary

The full range of differential pressures under various conditions is identified in Calculations DCS01-XGA-DS-CAL-B-01105-0 [Reference 12.8], DCS01-ASI-DS-CAL-R-10552-0 [Reference 12.9], and DCS01-QJJ-DS-CAL-V-10421-0 [Reference 12.10].

The pressure levels specified in Table 9-1 are to be used in this pressure test. These pressures are intended to bound a range of calculated differential pressures anticipated based on the various pressure conditions described above and detailed in the referenced calculations, with additional margin. The bounding differential pressures to be used for each penetration seal pressure test, the test hold time at each pressure, the acceptance criteria to be considered "sufficiently leak-tight", and the basis for each pressure, are identified in Table 9-1.

A hold time of 30 minutes has been established for each pressure level to ensure that sufficient time at pressure is maintained to; 1) confirm that no leakage occurs at that pressure, or 2) stabilize make up air and attain reasonably accurate leakage rate information for those configurations where leakage is detected.





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Table 9-1: Differential Pressure Test Levels

Test Stage	Differential Pressure (inch w.g.)	Required Hold Time (minutes)	Acceptance Criteria	Basis for the Selected Differential Pressure
1	1.0	30	Leakage ≤ 0.01 cfm/sq. ft. of penetration area - Note ¹	Testing at this differential pressure bounds the 0.51 inches w.g. pressure for C3b to C2 areas during normal operation [Reference 12.10].
2	5.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 4.0 inches w.g. pressure anticipated as a result of clean agent suppression system discharge [Reference 12.8].
3	10.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 7.0 inches w.g. pressure used as the screening pressure cutoff for fire induced pressures [References 12.8 and 12.9] and some of the HVAC pressure boundaries [Reference 12.10].
4	20.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the calculated fire induced pressures [Reference 12.9] and many of the HVAC pressure boundaries [Reference 12.10].
5	40.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the HVAC pressure boundaries [Reference 12.10].

Note ¹: 12" x 18" (approximate final dimensions of Structo Crete lined opening) Dow Corning Sylgard® 170 Silicone Elastomer (DC-170) seal area and 12" x 18" (approximate final dimensions of Structo Crete lined opening) Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) seal area @ < 0.01 cfm/sq. ft. leakage = maximum leakage of 0.03 cfm.

Each test assembly shall be attached to the pressure test apparatus and subjected to the pressures identified in Table 9-1 as described below.

- 9.2.1 The test assembly shall be attached to the pressure test apparatus and subjected to air pressure tests at the select pressure levels identified in Table 9-1, beginning with the Stage 1 pressure of 1.0 inches w.g. Once this pressure has been obtained, the pressure shall be maintained for the hold time specified in Table 9-1. The maximum leakage rate observed during the hold time shall be recorded. If the leakage rate exceeds the acceptance criteria during Stage 1 testing, the time of failure shall be noted and the test shall be continued, since leakage alone does not constitute failure after Stage 1.
- 9.2.2 Once the designated hold time has been achieved, the pressure shall be increased to the next pressure level identified in Table 9-1 (Stage 2, then Stage 3, then Stage 4 and finally Stage 5) and held for the designated hold time. The maximum leakage rate observed during each hold time shall be recorded.
- 9.2.3 Following completion of Stage 5 pressure testing, the test may continue at the discretion of the AREVA test engineer and the testing laboratory manager in charge. Subsequent pressures, hold times and maximum leakage rates shall be recorded as directed by the AREVA test engineer.
- 9.2.4 If at any pressure level (or test stage) the penetration seal becomes dislodged from the





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opening or otherwise catastrophically fails, the pressure test shall be terminated and the time to failure and pressure at which the failure occurred shall be recorded.

9.3 Post Test Examination

Following completion of the pressure test, visual and destructive (if deemed necessary) post-test examinations shall be performed. These examinations shall include, but not necessarily be limited to, the following:

Visual observations of penetration seal condition including:

- · Integrity of seal and conditions on the exposed side of the penetration
- · Integrity of seal and conditions on the unexposed side of the penetration
- · Location of any penetration seal degradation
- · Condition of seal to barrier interface
- · Condition of seal to penetrating item interfaces

Once visual observations are complete, destructive examinations may be used to obtain additional information or gain extra insights into penetration seal performance during the pressure tests.

10.0 DATA SYSTEMS

During the pressure tests, the various data systems connected to the test apparatus (blowers, anemometers, manometers, etc.) shall be controlled and monitored by the testing laboratory. Data recorded for these components shall be compiled and contained in the pressure test report.

11.0 TEST REPORT

The testing laboratory shall submit a report on the results of the test. The test report shall contain the collected data and required quality control documentation. The final test report shall be prepared in sufficient detail to summarize the total testing activity. The final report shall include as a minimum:

- Date of test
- Location of test
- · Description of test apparatus and test articles
- · Calibration documentation for all data systems connected to the test apparatus
- · Test procedures used
- Acceptance criteria
- · Provide quality control records
- · Results of the pressure test
- · Color digital photographs of the test project





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12.0 REFERENCES

- 12.1 *Shaw AREVA MOX Services Drawing DCS01-BMF-DS-PLF-A-04509, Sheet 1, Revision 0; Sheet 2, Revision 0; and Sheet 3, Revision 2
- 12.2 *Shaw AREVA MOX Services Drawing DCS01-BMF-DS-PLS-B-01692, Sheet 1, Revision 1
- 12.3 *Shaw AREVA MOX Services Procedure PP9-1, Revision 14, SSC Quality Levels & Marking Design Documents
- 12.4 AREVA NP Inc. Procedure 1702-25, Revision 018, Assignment of Nuclear Safety Classification to Products and Services
- 12.5 AREVA NP Inc. Document 56-9141754-001, AREVA NP Inc. Quality Assurance Program
- 12.6 AREVA NP Inc. Document 01-9198306 (latest revision), Installation Instruction Manual for MOX Penetration Seal Test Program
- 12.7 *Shaw AREVA MOX Services Document DCS01-BRA-DS-TRD-B-01365-0, Technical Requirements Document for MFFF Penetration Seals
- 12.8 *Shaw AREVA MOX Services Calculation DCS01-XGA-DS-CAL-B-01105-0, BMF HVAC and Fire Induced Pressure Loads
- 12.9 *Shaw AREVA MOX Services Calculation DCS01-ASI-DS-CAL-R-10552-0, Fire Induced Room Pressure Analysis
- 12.10 *Shaw AREVA MOX Services Calculation DCS01-QJJ-DS-CAL-V-10421-0, Pressure Differentials Across Internal Barriers within the MOX Facility
- 12.11 *Shaw AREVA MOX Services Calculation DCS01-QJJ-DS-CAL-V-13312-0, Confinement Boundary Air Leakage Criteria

Retrieval of Reference Documents

References identified with an (*) are maintained within MOX Records System and are not retrievable from AREVA Records Management. These are acceptable references per AREVA Administrative Procedure 0402-01, Attachment 8. See page 2 for Project Manager Approval of customer references.





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APPENDIX A: TEST DECK/TEST SLAB DRAWINGS

The test deck (test slab) for Pressure Test 11 is depicted on page A-2.

Page A-1

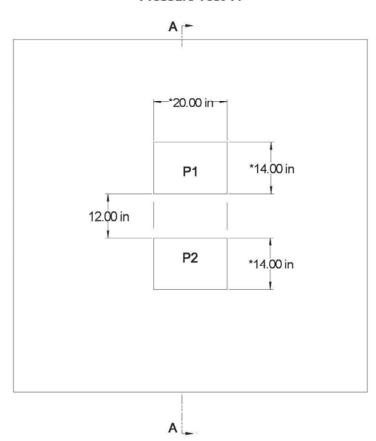




Document No.: 51-9215844-000

Detailed Test Plan for Conducting MOX Pressure Test 11

Pressure Test 11



NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.
- 3. SEE PAGE A-3 FOR SECTION A A.

Page A-2





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Section A - A

NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.

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APPENDIX B: TEST PENETRATION DRAWINGS

This appendix contains Test Penetration drawings. These drawings identify ABC wall construction within the opening as well as the penetration seal design for each test penetration.

Page B-1

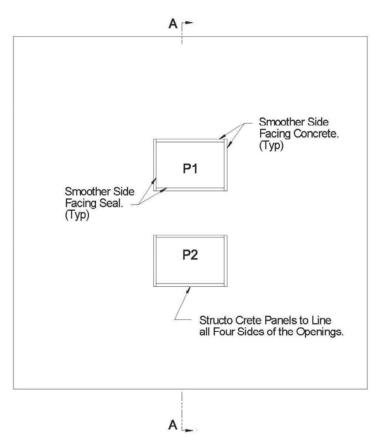




Document No.: 51-9215844-000

Detailed Test Plan for Conducting MOX Pressure Test 11

Pressure Test 11



NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.
- 3. SEE PAGE B-3 FOR SECTION A A.

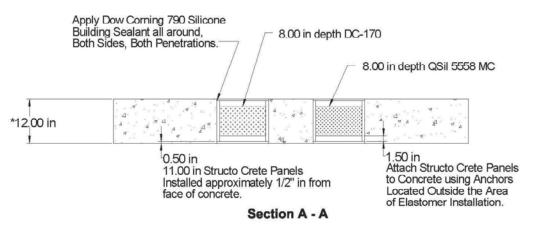
Page B-2





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Detailed Test Plan for Conducting MOX Pressure Test 11



NOTES:

- 1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
- 2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.

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APPENDIX C: BILL OF MATERIALS

This appendix contains the Bill of Materials for this pressure test. The Bill of Materials in Section C.1 identifies materials to be provided by AREVA. The Bill of Materials in Section C.2 identifies materials to be provided by MOX Services. The Bill of Materials in Section C.3 identifies materials to be provided by Intertek.





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C.1 Table Bill of Materials for AREVA Supplied Items

	Bill of Material for A	REVA Supplied Ite	ms		
Item	Description	Part Number	Quantity	Units	Total
1	Dow Corning Sylgard® 170 Silicone Elastomer (50lb part A, 50lb part B, 100lb Set)	N/A	2	Sets	2 Sets
2	Quantum Silicones QSil 5558MC (50lb part A, 50lb part B, 100lb set)	N/A	2	Sets	2 Sets





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C.2 Bill of Materials for MOX Services Supplied Items

	Bill of Material for MO	X Services Supplied	Items		
Item	Description	Part Number	Quantity	Units	Total
1					
2					
3					

^{*}Use surplus from previous MOX testing at Intertek Lab.





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C.3 Bill of Materials for Intertek Supplied Items

	Bill of Material for I	ntertek Supplied Ite	ms*		
Item	Description	Part Number	Quantity	Units	Total
1*	Structo-Crete Structural Concrete Panel (Need approximately 1 full sheet)	N/A	1	Pallet (20 Sheets)	1 Pallet

^{*}Use surplus from previous MOX testing at Intertek Lab.

Note

This BOM applies to Intertek Supplied Items other than materials required to construct the test slab. Construction of the test slab, including procurement of any materials required for the test slab, is the responsibility of Intertek.





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APPENDIX D: DESIGN VERIFICATION CHECKLIST

	DESIGN VERIFICATION CH	ECK	(LIS	Т		
λR	EVA		_	_	_	-
	Document Identifier 51 - 9215844 - 000					
	Title Detailed Test Plan for Conducting MOX Pressure Test 11				_	
1.	Were the inputs correctly selected and incorporated into design or analysis?	⊠ Y		N		N/
2.	Are assumptions necessary to perform the design or analysis activity adequately described and reasonable? Where necessary, are the assumptions identified for subsequent re-verifications when the detailed design activities are completed?	□ Y		N		N
	Note: If there are no assumptions (of any type), then N/A shall be checked.		-		-	
3.	Are the appropriate quality and quality assurance requirements specified? Or, for documents prepared per AREVA NP Inc. procedures, have the procedural requirements been met?	⊠ Y		N		N/
4.	If the design or analysis cites or is required to cite requirements or criteria based upon applicable codes, standards, specific regulatory requirements, including issue and addenda, are these properly identified, and are the requirements/criteria for design or analysis met?	⊠ Y		N		N
5.	Have applicable construction and operating experience been considered?	⊠ Y		N		N
6.	Have the design interface requirements been satisfied?	⊠ Y		N		N
7.	Was an appropriate design or analytical method used?	⊠ Y		N		N
8.	Is the output reasonable compared to inputs?	⊠ Y		N		N
9.	Are the specified parts, equipment and processes suitable for the required application?	⊠ Y		N		N
10.	Are the specified materials compatible with each other and the design environmental conditions to which the material will be exposed?	⊠ Y		N		N
11.	Have adequate maintenance features and requirements been specified?	□ Y		N	×	N
12.	Are accessibility and other design provisions adequate for performance of needed maintenance and repair?	□ Y		N	⊠	N
13.	Has adequate accessibility been provided to perform the in-service inspection expected to be required during the plant life?	□ Y		N		N
14.	Has the design properly considered radiation exposure to the public and plant personnel?	ПΥ		N		N
15.	Are the acceptance criteria incorporated in the design documents sufficient to allow verification that design requirements have been satisfactorily accomplished?	⊠ Y		N		N
16.	Have adequate preoperational and subsequent periodic test requirements been appropriately specified?	□ Y		N	×	N
17.	Are adequate handling, storage, cleaning and shipping requirements specified?	⊠ Y		N		N
18.	Are adequate identification requirements specified?	⊠ Y		N		N
19.	Is the document prepared and being released under the AREVA NP Inc. Quality Assurance Program? If not, are requirements for record preparation review, approval, retention, etc., adequately specified?	⊠ Y		N		N

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APPENDIX E Commercial Grade Dedication-Related Documents



AREVA NP Inc.

July 22, 2014

Report No. 101276459SAT-019

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The vast majority of penetration seals that will be installed throughout the MFFF will be designated as quality level QL-1. For this reason, permanent penetration seal materials used in this test program were procured by AREVA or supplied by MOX Services and suitably baselined so that future procurements of the same commercial materials can undergo the Commercial Grade Dedication process in support Nuclear Safety Related (i.e., MOX QL-1) plant installations.

Only the primary seal material(s) that were specified as a part of the final penetration seal design and left in place during the test needed to be base-lined for future dedication of similarly procured materials. For this fire test, the following AREVA documents contain information associated with materials that underwent the base-lining process. These documents establish material critical characteristics as a baseline for future Commercial Grade Dedication.

- AREVA Document 51-9212659-000, "Dow Corning Sylgard 170 Silicone Elastomer Critical Characteristics"
- AREVA Document 51-9212663-000, "Quantum Silicones QSil 5558MC Silicone Elastomer Critical Characteristics"
- AREVA Document 51-9212668-000, "Dow Corning 790 Silicone Building Sealant Critical Characteristics"

These documents are available from the AREVA Records Management System or the MOX Records Management System.

Note: Even though the DC-790 material used in Pressure Test 11 was only intended as a construction aid to reduce the chance of leakage occurring through the Structo-Crete to concrete interfaces, the DC-790 material used in this test was conservatively included in the MOX Penetration Seal Test Program's material baseline process.



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APPENDIX F Quality Documents





Document No.: 01-9198306-004

Installation Instruction Manual for MOX Penetration Seal Test Program

A.1 Quality Verification for Installation of Silicone Elastomer Penetration Seals

Page 1 of 4

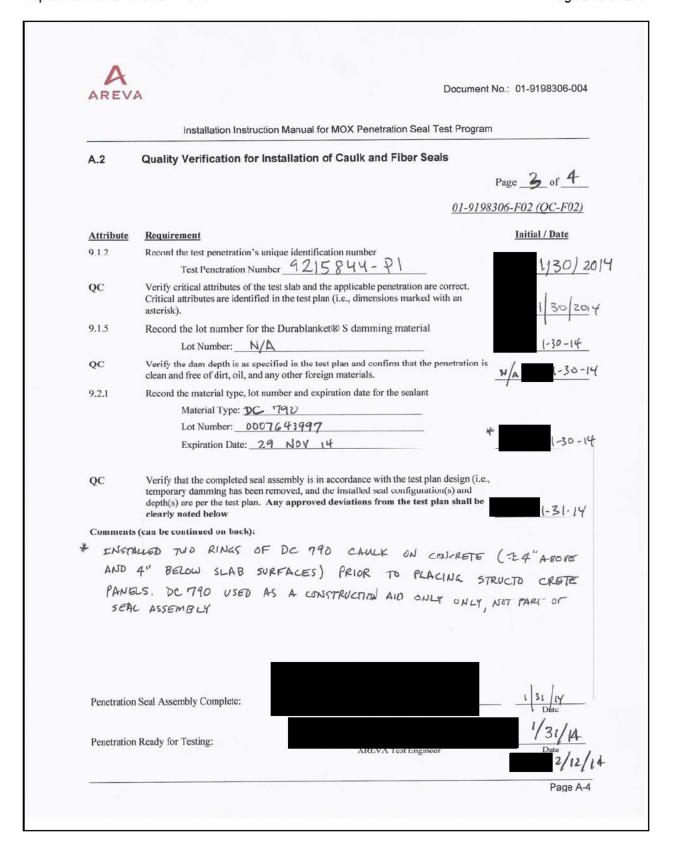
01-9198306-F01 (QC-F01)

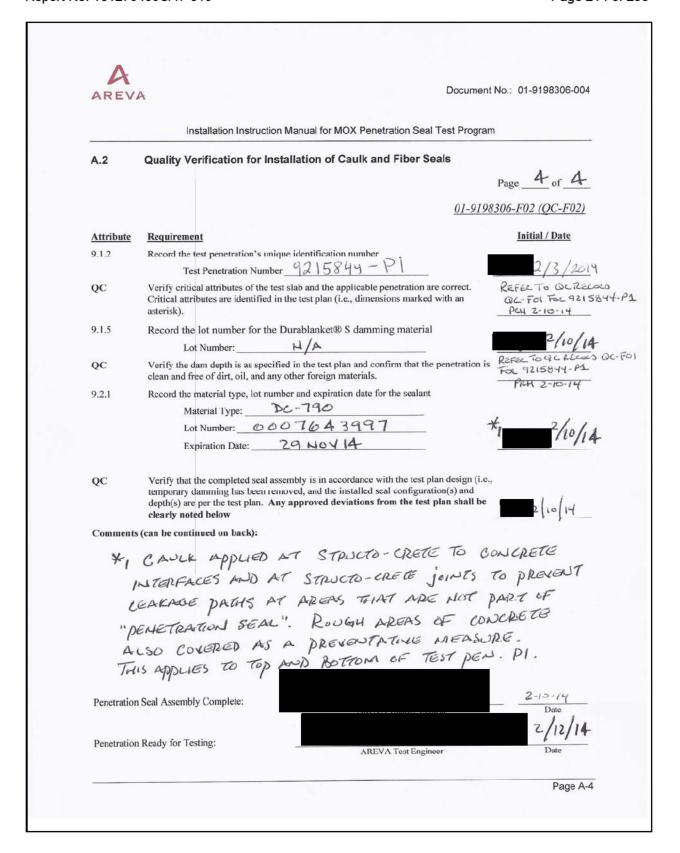
Attribute	Requirement	Initial / Date
7.1.2	Test Penetration Number 9215844 - P1	1/29/2014
QC	Verify critical attributes of the test slab and the applicable penetration are correct. Critical attributes are identified in the test plan (i.e., dimensions marked with an asterisk).	1 29 2014
QC	Verify the dam depth is as specified in the test plan and confirm that the penetration is clean and free of dirt, oil, and any other foreign materials.	1/31/14
7.2.1.1	Record material type, lot number and shelf life for batch on Form QC-F01, Table A-1	Attached
7.2.1.3	Record the batch number on Form QC-F01, Table A-1	Attached
7.2.12	Record sample weight and sample density on Form QC-F01, Table A-1	Attached
QC	Verify the total sample weight recorded on the cup label, the sample weight recorded on the cup label and Form QC-F01, Table A-1, and sample density recorded on the cup label and Form QC-F01, Table A-1. Record acceptance on Form QC-F01, Table A-1.	Attached
7.3.2	Remove all temporary damming per Section 6.3	2/4/14
QC	Verify that the completed seal assembly is in accordance with the test plan design (i.e., temporary damming has been removed, and the installed seal configuration(s) and depth(s) are per the test plan. Any approved deviations from the test plan shall be clearly noted below.	2/10/14
Comments	(can be continued on back):	
**	DURING REMOVAL OF TEMP. DAM ON BOTTOM	OF PI,
	SEAL WAS ACCIDENTALLY DAM AGED. DAMAGED	
4	S APPROX. I"W X 2"L X 3/4" DEEP. DAMAGED "1	FLAP"IS
5	TILL ATTACHED TO SEAL ON I SIDE AND CAN BE	PUSHED
B	ACK INTO PLACE. 1/1/1/18 1/1/11	"ELAP"
NO	REPAIRED; TOSTED AS-IS.	
	Seal Assembly Complete:	2/15/14 Date
D	Deade for Testings	2/12/14
Penetration	Ready for Testing: AREVA Test Engineer	Date



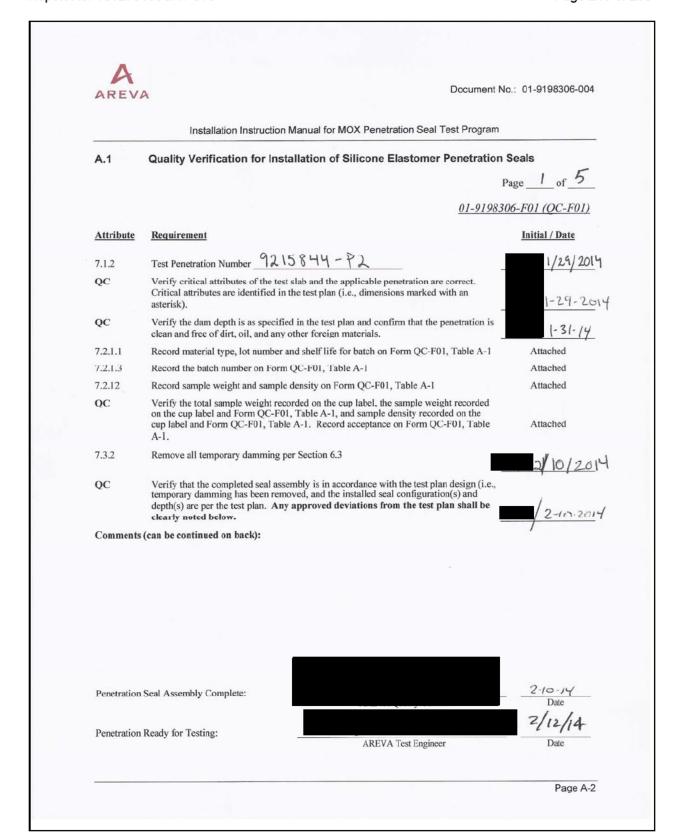
Test Penetration Number 42 58 44 - P			Installation Instru	Installation Instruction Manual for MOX Penetration Seal Test Program	eal Test Program		Document No.: 01-9198336-004
Hame Lot Number Shelf Life Batch Number Sample Quality Control Sample (Expiration) O6 3 80 2 0 0/30/2011 06 3 80 2 - DVR - 200 140, 8 79, 4 72-10-10 **Control Control Contr					Test Penetration	Number 92158	2
Name Lot Number Shelf Life Batch Number Sample Sample Cold Init 063 802 6/30/20 4 663 802 - DVR - 200 140, 8 79, 4 79, 4 79, 5 79, 5		Form Q	C-F01, Table A	-1: Silicone Elastomer Batch S	sample Quality	Control	5
16.3 802 6/30/26/14 063 802 - DVR-200 140,8 79.4	Product Name	Lot Number	Shelf Life (Expiration)	Batch Number	Sample Weight (g)	Sample Density (lbs/ft³)	QC Initial / Date
19.5 141.0 79.5		263802	6/30/2014	063802- DVR-200	140,8	79.4	12-10-14
		4 (, ,,		141.0	79.5	2-10-14







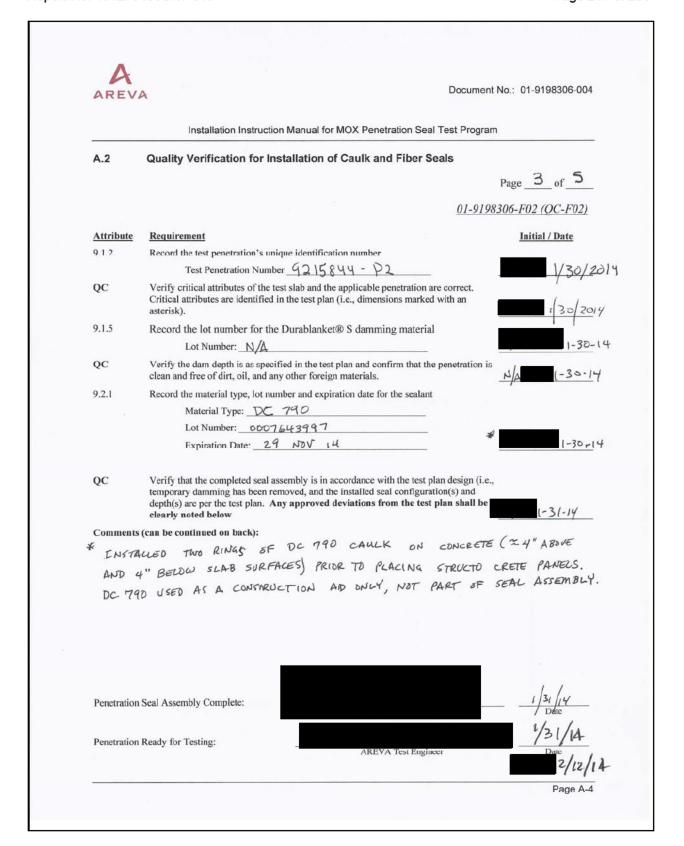






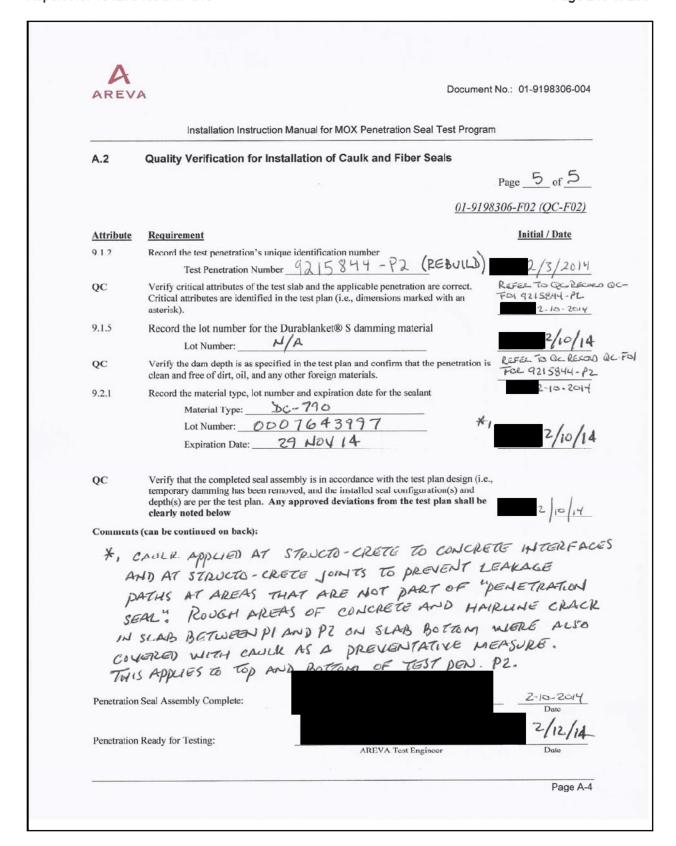
Form QC-F01, Table A-1: Silicone Elastomer Batch Sample Quality Cortrol Product Name Lot Number Sample Sample		Insta	llation Inst ^r u	Installation Instruction Manual for MOX Fenetration Seal Test Program	Seal Test Progran	-	
Form QC-F01, Table A-1: Silicone Elastomer Batch Sample Quality C Shelf Life Batch Number Sample Weight (g) 31014 - DVR - 14 C 131014 - DVR - 178 * 140.5 151014 - DVR - 178 * 140.5 151014 - DVR - 178 * 145.4 140.5 * 145.4					Test Penetration	Number 9215	
Shelf Life Batch Number Sample Weight (g)		Form QC-FC	oi, Table A	1: Silicone Elastomer Batch	Sample Quality	Control	Page 7 of 2
131014 11/04/2014 131014 - DVR - 145 * 141.0 131014 - DVR - 178 * 140.5 131014 - DVR - 178 * 140.5 151014 - DVR - 179 * 145.4 * ORIGINAL SEAL (MOT TESTED) ** ORIGINAL SEAL			Shelf Life xpiration)	Batch Number	Sample Weight (g)	Sample Density (Ibs/ft³)	QC Initial / Date
131014-DVR-146 * 141.0 131014-DVR-178 ** 140.5 131014-DVR-179 ** 145.4 * ORLGINAL SEAL (not tested) ** PRE-BULT SEAL			104/2014		141.1	79.6	12-10-14
131014-DUR-178* 140.5 151014-DUR-179* 145.4 *ORLEIMAN SEM (MOT TESTED) ** RE-BULT SEM			71	9	0,141	79,5	1 2-10-14
# ORLGINAL SEAL (NOT TESTED) ** RE-BULT SEAL	3			131014-DUR- 178 **	140.5	79.2	71-01-7
* ORIGINAL SEAL (NOT TESTED) ** PE-BULT SEAL	1,			131014-DVR-179*	H.2HI	82.0	2-10-14
* ORIGINAL SEAL (NOT TESTED) ** RE-BULT SEAL							
+* RE-BULT SEAL				* ORUGINAL SEAL (MOT TESTED)			
				+* RE-801CT SEAL			





AREVA		nt No.: 01-9198306-004
	Installation Instruction Manual for MOX Penetration Seal Test Progr	am
A.2	Quality Verification for Installation of Caulk and Fiber Seals	
		Page 4 of 5
	<u>01-91</u>	98306-F02 (QC-F02)
Attribute	Requirement	Initial / Date
9.1.2	Record the test penetration's unique identification number	014/01
	Test Penetration Number 9215844- \$2	2/5/20
QC	Verify critical attributes of the test slab and the applicable penetration are correct. Critical attributes are identified in the test plan (i.e., dimensions marked with an asterisk).	2/5/2014
9.1.5	Record the lot number for the Durablanket® S damming material	
	Lot Number: N/A	2/5/201
QC	Verify the dam depth is as specified in the test plan and confirm that the penetration clean and free of dirt, oil, and any other foreign materials.	2/6/20
9.2.1	Record the material type, lot number and expiration date for the sealant	
	Material Type: DC-796	
	Lot Number: 0007643997 Expiration Date: 29 Nov 2014	2/6/20
QC	Verify that the completed seal assembly is in accordance with the test plan design (i.e.,
	temporary damming has been removed, and the installed seal configuration(s) and depth(s) are per the test plan. Any approved deviations from the test plan shall clearly noted below	2-10-201°
	s (can be continued on back):	
	is being robuilt due to Shrinkage in the Pirst	
	ST SEAL SHRINKAGE WAS ATTRIBUTED TO	
20	PROXIMATE 45°F TEMP. DROP AT THE TEST	LAB
11.11	TOWN 310 HRS OF SEAL INSTALLATION. AF	TEK
	AL LUDE THERE WAS N /32 TO YILL GAD	THRU
	1: 1: 6 1:	079
A	COMPLETE RE-BUILD, WALLDING STRUCTO-CA	2-10-14
	n Seal Assembly Complete:	Date 2/12/14
Penetratio	n Ready for Testing: AREVA Test Engineer	Date









PO Box 710290, Houston, TX 77271-0290 11707 S Sam Houston Parkway W, Ste K, Houston, TX 77031 Phone: 281-933-7222 Fax: 281-933-7774 info@promatec.com www.promatec.com

CERTIFICATE OF CONFORMANCE

CERTIFICATION 45550/13-607 NUMBER:

CERT DATE: JUNE 20, 2013

JOB NUMBER: 2860

SHIP DATE: JUNE 20, 2013

CUSTOMER: AREVA NP INC.

PRODUCT: DC-170

c/o INTERTEK TESTING SERVICES NA, INC.

Dow Corning® Sylgard 170

16015 SHADY FALLS ROAD

ELMENDORF, TX 78112-9784

Elastomer; Part A&B 50/50 Blend

CUSTOMER P.O. No. 1013037393, Rev. 1

ORDER NUMBER: ITEM 1

N/A

VENDOR: PCI PROMATEC

CUSTOMER

SPECIFICATION NUMBER:

QUANTITY: 14 SETS @ 100lbs PER SET

(Consisting of 2 each 6 gallon pails

per kit)

IDENTIFICATION

NUMBER: DC-170-063B02 PART A & B

EXPIRATION

DATE: 30 JUNE 2014

CERTIFICATION REQUIREMENTS:

We hereby certify that all items furnished herein meet the requirements of the applicable product specifications, the above referenced customer order number, and supporting specifications. Vendor material certification on file and available upon written request.

Shelf Life - Twelve (12) months from date of certification, last day of the month.

This material is provided in accordance with Promatec Quality Assurance Program QAM20188, Issue F, dated 06/20/03.

QUALITY ASSURANCE MANAGER

Form OC-8 Rev. 5 - 11/01/88

WORLD-CLASS CONSTRUCTION®





3. PO Box 710290, Houston, TX 77271-0290 11797 S Sam Houston Parkway W, Ste K, Houston, TX 77031 Phone 281-933-7222 Fax. 281-933-7774 mfo@promatec.com www.browstec.com

REC.

CERTIFICATE OF CONFORMANCE

CERTIFICATION 45550/14-246 NUMBER:

CERT DATE: JANUARY 6, 2014

JOB NUMBER: 2933

SHIP DATE: JANUARY 6, 2014

CUSTOMER: AREVA NP INC.

PRODUCT:

DC-790-GREY, 10.30z c/o INTERTEK TESTING SERVICES NA, INC. Dow Corning 790 Building Sealant; 10.3oz Tubes 16015 SHADY FALLS ROAD

GREY in color

CUSTOMER P.O. No. 1013037393, REV. 7 ORDER NUMBER:

ITEM 80 [MAT'L #D027563] .

ELMENDORF, TX 78112-9784

VENDOR: PCI PROMATEC

CUSTOMER

SPECIFICATION NUMBER:

QUANTITY: 4 CASES @ 12 EA 10.3oz Tubes

48 TUBES TOTAL

IDENTIFICATION 0007643997

NUMBER:

EXPIRATION

DATE: 29 NOVEMBER 2014

CERTIFICATION REQUIREMENTS:

We hereby certify that all items furnished herein meet the requirements of the applicable product specifications, the above referenced customer order number, and supporting specifications. Vendor material certification on file and available upon written request.

Shelf Life - Twelve (12) months from date of manufacture December, 2013. Note - Dow Corning calendar year based on 360-day cycle.

This material is provided in accordance with Promatec Quality Assurance Program QAM20188, Issue F, dated 06/20/03.

QUALITY ASSURANCE MANAGER

Form QC-8 Rev. 5-11/01/88

WORLD-CLASS CONSTRUCTION®





QSil 5558MC Certificate of Conformance

Product	QSil 5558MC
Batch Identification	131014
Purchase Order	1013038872
Shipping Address	Areva C/O Intertek Testing Labs 16015 Shady Falls Road Elmendorf, TX 78112
Quantity	4,000lbs

Final Batch Physicals

Tests	Specifications	Results
Appearance "A"	Black	Black
Appearance "B"	Beige	Beige
Viscosity "A" component, cps #5 Spindle @ 20rpm	<4,000	3,400 cps
Viscosity "B" component, cps # 5 Spindle.@ 20 rpm	<4,000	2,280 cps
Specific Gravity "A" component (g/cm3)	1.35-1.40	1.37
Specific Gravity "B" component (g/cm³)	1.35-1.40	1.37
Catalyzed Properties	1:1 Mix Ratio	w,
Work Time, (snap time), minutes	20-40	27 min
Shore A, 24 hour	>45.	61
QSi Heat Cured Method	15 min. @ 150°C	
Tensile strength, psi	>400	462
Elongation, %	>75	78
Young's Modulus	Report	595
General Product I	nformation	
Date of Manufacture	10/28/13	3.4
Shelf Life, months	12 months from date of shipment if stored at ≤38C (100F).	

Storage Conditions:

This material should be stored in the original, unopened container at less than 100F. Under these conditions, the material will be useful for a period of 12 months.

QSi Batch Release Authorization:

Quality Control

QSi, LLC

Quantum Slicones certifies that the material described above has been tested in accordance with the company's standard lot acceptance procedures. This is to certify that the above shipment has been determined to meet all QSi specification requirements at the time of manufacture. This certification applies only to the inaterial lot tested. Lot acceptance data are available for examination. This material has not been subjected to tests appropriate for medical device or pharmaceutical applications. QUANTUM SILICONES MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE WITH RESPECT TO THE PRODUCT TO WHICH THE ABOVE INFORMATION REFERS. [This Certificate is valid unsigned.]

Quantum Silicones, LLC 8021 Reyenn Road Richmond, VA 23237 (804)271-9010 Fax (804)271-9055 www.quantumsilicones.com

Date of shipment 11/4/2013

REV-3 9/26/13



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01-G101276459SAT-018 REMARKS Receiving Only: Material stored in conditioning room 1/7/2014 MABrown Accel. Re. Hild ACCEPTANCE > > > > Report No: Date Received: Inspected By: Date Inspected: Con. G G 9 G Safety Fiel'd Y/N Q/A RECEIVING REPORT > > > > Recid > > > > Mad > \succ > > G101276459SAT-018 Pressure Test 9 Areva VP c/o PCI Promatec INTERTEK -Elmendorf, TX SAT1401071420-001 SAT1401071420-003 SAT1401071420-004 SAT1401071420-002 LD. NO. AREVA NP BiO ł 1 ı I QUANTITY Order Rec'd case case case case case Project Location: case case Client/Project Name: Client or Project No.: Received From: P.O. NO. Client Client Client DC-790-Grey, 10.30z. Dow Corning 790 Building Sealant (12 tubes each); Lot# 0007643997, Ctn 4, expires 11/29/14 DC-790-Grey, 10.30z. Dow Corning 790 Building Sealant (12 tubes each); Lot # 0007643997, Ctr. 1, expires 11/29/14 DC-790-Grey, 10.3oz. Dow Corning 790 Building Sealant (12 tubes each); Lot # 0007643997, Ctr. 2, expires 11/29/14 DC-790-Grey, 10.3oz. Dow Corning 790 Building Sealant (12 tubes each); Lot # 0007643997, Ctn 3, expires ITEM DESCRIPTION 9/12-NOAP-005.7.1





QSil 5558MC Certificate of Conformance

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Batch Identification	131014
Purchase Order	1013038872
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Catalyzed Properties	1:1 Mix Ratio	v .
Work Time, (snap time), minutes	20-40	27 min
Shore A, 24 hour	>45.	61
QSi Heat Cured Method	15 min. @ 150°C	
Tensile strength, psi	>400	462
Elongation, %	>75	78
Young's Modulus	Report	595
General Product I	nformation	
Date of Manufacture	10/28/13	
Shelf Life, months	12 months from date of shipment if stored at ≤38C (100F).	

This material should be stored in the original, unopened container at less than 100F. Under these conditions, the material will be useful for a period of 12 months.

QSi Batch Release Authorization:

QSi Batch Release Authorization.

Quality Control

QSi, LLC

Quantum Silicones certifies that the material described above has been tested in accordance with the company's standard lot acceptance procedures. This is to certify that the above shipment has been determined to meet all QSi specification requirements at the time of manufacture. This certification applies only to the material lot tested. Lot acceptance data are available for examination. This material has not been subjected to tests appropriate for medical device or pharmaceutical applications. QUANTUM SILICONES MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE WITH RESPECT TO THE PRODUCT TO WHICH THE ABOVE INFORMATION REFERS. [This Certificate is valid unsigned.]

8021 Reyenn Road Richmond, VA 23237 (804)271-9010 Fax (804)271-9055 www.quantumsilicones.com

Date of shipment 11/4/2013

REV-3 9/26/13



Areva No.: Areva NP	Intertel	Client/Project Name:	e N		_	Q/A KECEIVING KEPORT	Ž	9		tod		02-610	1266	HANT-003E
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LIST OF CALIBRATED INSTRUMENTATION

Description	Serial No.	Calibration Due Date
Thermo-Hygrometer	130548237	9/19/15
Data Acquisition System	18041FE	8/11/2014
Pressure Transducer	406707	1/30/2015
Mass Flowmeter	4270050001001	1/30/2015
Mass Flowmeter	4270050003001	1/30/2015
Stopwatch	130176939	3/29/15







Calibration complies with ISO/IEC 17025, ANSI/NCSL Z540-1, and 9001

Build B



Cert. No.: 4096-5373559

Traceable® Certificate of Calibration for Digital Humidity/Temp. Meter

Manufactured for and distributed by: Fisher Scientific, 300 Industry Drive, Pittsburgh, PA 15275-1001 Instrument Identification:

Model Numbers: 11-661-13, FB61254, 245C5 S/N: 130548237 Manufacturer: Control Company

Standards/Equipment:

Chilled Mirror Hygrometer

Due Date Serial Number 31874/H2048MCR 6/14/15 9/26/13

NIST Traceable Reference 11081

Digital Thermometer

41334977/41335007

4000-4643062

Certificate Information:

Technician: 104 Test Conditions:

23.0°C

Procedure: CAL-17 51.0 %RH 1013 mBar Cal Date: 9/19/13

Cal Due: 9/19/15

Calibration Data: (New Instrument)

	Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±U	TUR
Ī	%RH		N.A.		42.95	42	Y	39	47	1.30	3.1:1
-	°C		N.A.		24.218	24	Y	23	25	0.590	1.7:1

This instrument was calibrated in compliance with ISO/IEC 17025:2005 and ANSI/NCSL Z540-1-1994 Part 1.

A Test Uncertainty Ratio of a least 4:1 is minisined unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level, in tolerance conditions are based on test results falling within specific limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable to NIST and through NIST to the International Bystem of Units (81).

Nominal=Slandard's Reading: As Left=Instrument's Reading: In Tol=In Tolerance; MiniMax=Acceptance Range; ±U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Min = As Left Nominal(Rounded) - Tolerance; Max = As Left Nominal(Rounded) + Tolerance; Dete=MM/DD/YY

Maintaining Accuracy:

In our epinion once calibrated your Digital Humidity/Temp. Moter should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Humidity/Temp Meters change little, if any at all, but can be affected by eging, temperature, shock, and contamination.

Recalibration:

This device was calibrated using a single test point. Should additional test points be required, please contact Control Company for factory calibration and re-cartification traceable to National Institute of Standards and Technology.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

nany is an ISO 17025 2005 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01.

Control Company is ISO 9001:2008 Quality Certified by (DNV) Det Norske Verilas, Certificate No. CERT-01805-2008-AQ-HOU-RVA.

International Laboratory Accreditation Cooperation (ILAC) - Multilateral Recognition Arrangement (MRA).

Page 1 of 1

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16015 Shady Falls Road Elmendorf, TX 78112 210-635-8100 210-635-8101 fax

Certificate of Verification

Staff Engineer

Verification Date: 02/11/2014

Re-verification Date: 08/11/2014

Manufacturer: National Insturments

Model No.: USB-6210

(Only use 3 channels)

Test Engineer

Serial No.: 18041FE

Equipment Description: Data Acquisition System

Calibration Sources: Ronan SN: 11380 due 4/6/2014

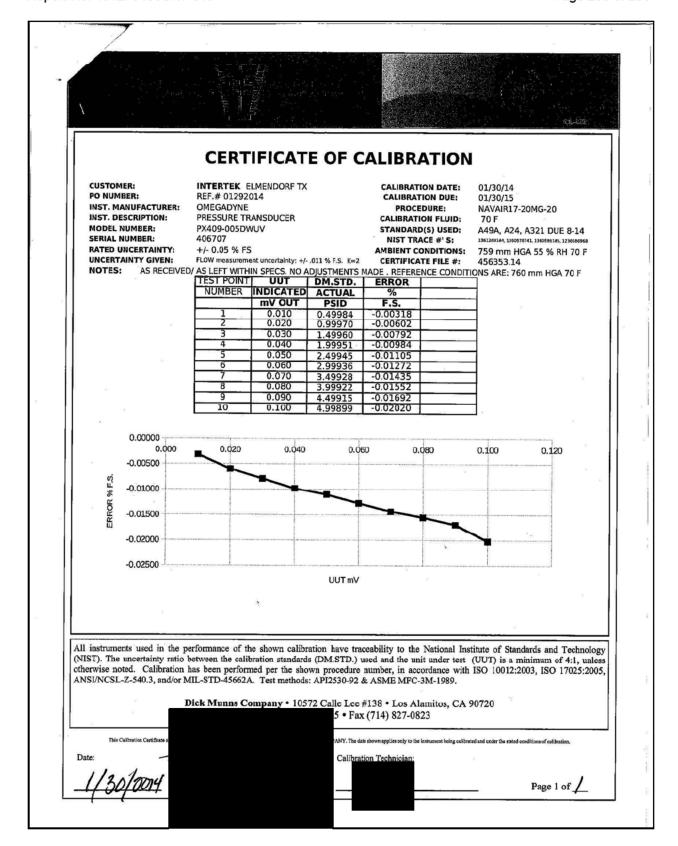
Performance: See the attached sheet

Verification Performed By: Verification Approved By:

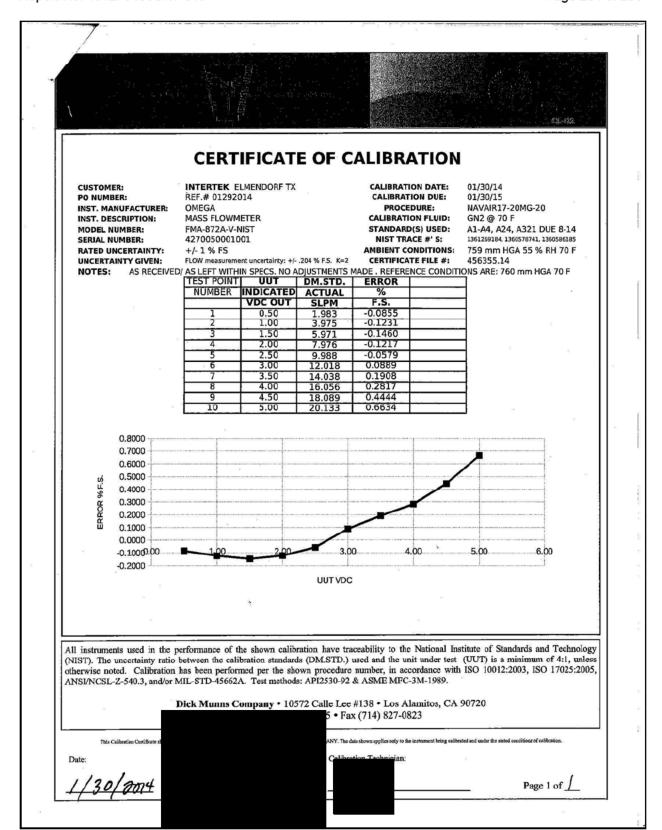
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This Data Acquisition System was verified following the Draft "Work Instruction for Verifying Yokogawa Darwin Data Acquisition Systems" dated 8/28/2013

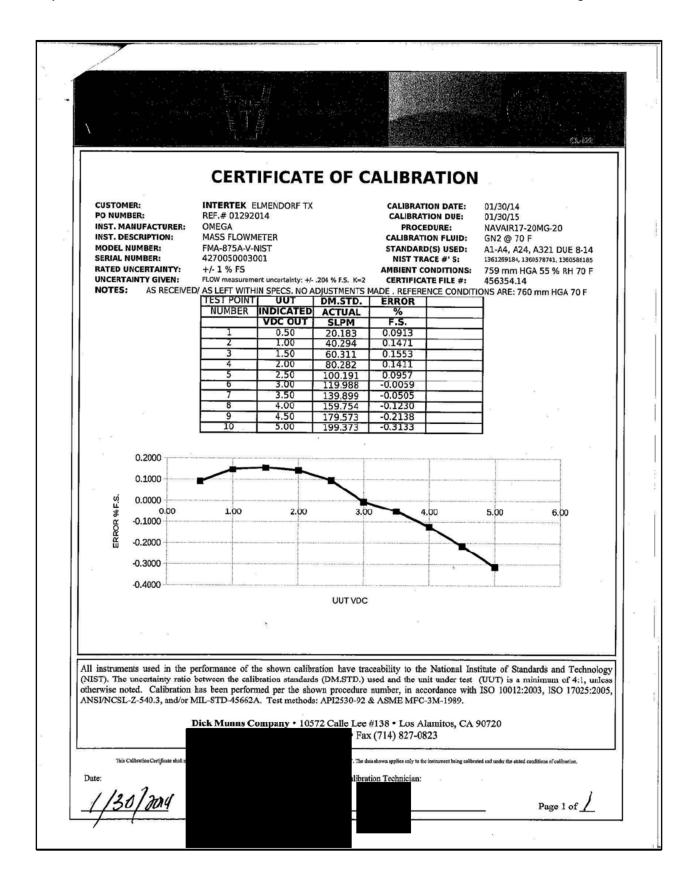














9/11/13





Calibration complies with ISO 9001 ISO/IEC 17025 AND ANSI/NCSL Z540-1



Certificate No. 1750.01

Cert. No.: 1045-5005294 Traceable® Certificate of Calibration for Watr/Shock Res Stpwch

Manufactured for and distributed by: Fisher Scientific, P.O. Box 1768, Pitisburgh, PA 16230

Instrument Identification:

Model: S40799-7

S/N: 130176939

Manufacturer: Control Company

-0.300

Standards/Equipment:

Description Non-Contact Frequency Counter

Serial Number 26.66879

Due Date 7/02/13

NIST Traceable Reference

1000320243

8.640

Certificate Information:

Technician: 150

Unit(s)

Sec/24hr

Procedure: CAL-01

Cal Date: 3/29/13

Cal Due: 3/29/15

0.130

>4:1

Test Conditions: 22.5°C 42.0 %RH 1020 mBar

Nominal

Calibration Data: (New Instrument)

As Found

Nominal As Left In To Min Max TUR

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncortainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncortainty evaluation includes the instrument under least and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a covarage factor k=2 to approximate a 95% conflictore level. In otherance conditions are based on text results falling within specifing within specified within specific within speci

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tel=In Tolerance; Min/Mex=Acceptance Range; ±U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Mex-Min)/2; Min = Nominal(Rounded) - Telerance; Max = Nominal(Rounded) + Telerance; Date=MMDD/YY

Maintaining Accuracy:

In our opinion once calibrated your Watr/Shock Res Stowch should maintain its accuracy. There is no exact way to determine how long celibration will be maintained. Watr/Shock Res Stowchs change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

rol Company is an ISO 17025:2005 Calibration Laboratory Accredited by (A2LA) American Association for Laboratory Accreditation, Certificate No. 1750.01. Control Company is ISO 9001:2008 Quality Certified by (DNV) Del Norsie Veritas, Certificate No. CERT-01805-2006-AQHOU-ANAS. International Laboratory Accreditation Cooperation (ILAC) - Multifacteral Recognition Arrangement (MRA).

Page 1 of 1

Traceable® is a registered trademark of Control Company



PRO	JECT NO: G101276459 SAT-019 CLIENT: AREVA
roje	ct Description PRESSURE TEST # ()
	ASSEMBLY SAT UNSAT
	Proper materials used Material documentation complete Configuration/dimensions in accordance w/ approved drawings Description of assembly: NOX PRESSURE #11
í.	Correct material used Material documentation complete Correct cable lay-in and fill requirements Description of electrical cable:
II.	THERMOCOUPLES
	Correct thermocouple type, certs received
V.	FIRE BARRIER
	Name or type of material QSIL + STRUCTORICTE + DCITO INTERTEK received material documentation provided by Client Materials provided by INTERTEK properly documented
٧.	FINAL PREBURN VERIFICATION Client
	Final visual inspection & approval (Initials)
	CALIBRATION DOCUMENTATION (S/N and calibration due date) Data Acquisition Equipment: Other Measurement Devices:
	Temperature 57 Humidity 38 Date 2.12.14 Time of Test start 11:13 am
	INTERTEK pre-burn checklist performed by
	Client representative present to witness test



Intertek **TEST ACTIVITIES EVENT LOG** This Log is used to document the date and note the significant events during the completion of Test Project #G101276459SAT-019 for AREVA NP, Inc. Page 1 of 1 ITEM INIT'L DATE Concrete poured by Alamo Concrete 1/10/14 MD Concrete conditioned 1/13/14 MD Critical attributes of test slab verified 1/29/14 MD Completed seal assemblies verified against the test plan 2/10/14 MD Pressure Test #11 conducted 2/12/14 MD

9/12 NQAP-007.7.3



Certificate of Conformance

Client Name: Areva NP Inc. Date: July 22, 2014

Project No: 61012764598AT-019

Intertek Testing Services NA (Intertek) has conducted testing for AREVA NP Inc., on the pressure resistance capabilities of Dow Corning® Sylgard 170 Silicone Elastomer (DC-170), Dow Corning® 790 Building Sealant (DC-790) and Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) through a 12" thick concrete deck for compliance with the applicable requirements of and in accordance with AREVA NP Inc. Document No. 51-9215844-000, *Detailed Test Plan for Conducting MOX Pressure Test* 11. This evaluation took place on February 12, 2014.

The materials, processes), and deliverable(s) in this project were managed under and conform to the test laboratory's 10CFR50 Appendix B Quality Assurance Program.

July 22, 2014

Michael A Brown Quality Supervisor Date

Intertek Testing Laboratory 16015 Shady Falls Road, Elmendorf TX 78112 210-635-8100



AREVA NP Inc.

July 22, 2014

Report No. 101276459SAT-019

Page 237 of 238

Quality Assurance Statement

Intertek is devoted to engineering, inspection, quality assurance and testing of building materials, products and assemblies. Intertek has developed and implemented a Quality Assurance Program designed to provide its clients with a planned procedure of order and document processing for inspection and testing services it provides to assure conformity to requirements, codes, standards and specifications. The Program is designed to meet the intent of ANSI 45.2 Quality Assurance Program Requirements for Nuclear Power Plants, and complies with the requirements of the ASME Code, SPPE, Military Standards and other less stringent programs. It is the Laboratory's intention to adhere strictly to this Program, to assure that the services offered to its clients remains of the highest quality and accuracy possible.

All QA Surveillance documents remain on file at the Laboratory, and are available for inspection by authorized personnel in the performance of an on-site QA Audit. All materials, services and supplies used herein were obtained with appropriate QA Certifications of Compliance.



AREVA NP Inc. July 22, 2014
Report No. 101276459SAT-019 Page 238 of 238

REVISION SUMMARY

DATE	SUMMARY
July 22, 2014	Original Issue Date

