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*Part I*

**F-Area Hazardous Waste Management Facility Correction Action  
Report, Third and Fourth Quarter 1998, Volumes I and II**

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# **F-AREA HAZARDOUS WASTE MANAGEMENT FACILITY CORRECTIVE ACTION REPORT (U)**

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**THIRD AND FOURTH QUARTER 1998**

**Volume I**

**Publication Date: March 1999**

Authorized Derivative Classifier  
and Reviewing Official:

C.D. Reeres, P.E.R.O.

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Controlled Nuclear Information

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*Prepared for the U.S. Department of Energy under Control Contract No. DE-AC09-96SR18500*

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## Executive Summary

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The groundwater in the uppermost aquifer beneath the F-Area Hazardous Waste Management Facility (HWMF), also known as the F-Area Seepage Basins, at the Savannah River Site (SRS) is monitored periodically for selected hazardous and radioactive constituents as required by Module III, Section C, of the 1995 Resource Conservation and Recovery Act (RCRA) Renewal Permit (South Carolina Hazardous and Mixed Waste Permit SC1-890-008-989), effective October 5, 1995 (hereafter referred to as the RCRA permit). Currently, the F-Area HWMF monitoring network consists of 86 wells of the FSB well series, 9 wells of the FSL series, and well HSB 85A, each of which is screened in one of the three hydrostratigraphic units that make up the uppermost aquifer beneath the F-Area HWMF (Figures 2–5, Appendix B). This report presents the results of the required groundwater monitoring program as identified in provision IIIC.H.11.c of the RCRA permit and Section C of the Underground Injection Control permit application (hereafter referred to as the UIC application).

As shown in Table C-1 (Appendix C), the following constituents or summations exceeded the Groundwater Protection Standard (GWPS) during the second half of 1998 in samples from monitoring wells at the F-Area HWMF: beta dose, cadmium, cobalt, lead, mercury, nickel, nitrate-nitrite (as N), vanadium, zinc, bis(2-ethylhexyl) phthalate, trichloroethylene, trichlorofluoromethane, gross alpha, nonvolatile beta, sum of alpha emitters, sum of beta emitters, total radium, and tritium.

In addition, the following radionuclides individually exceeded the standard for either sum of alpha emitters or sum of beta emitters: americium-241, cesium-137, curium-243/244, iodine-129, radium-226, radium-228, strontium-90, technetium-99, uranium-233/234, uranium-235, and uranium-238.

Tritium was the primary constituent detected above the GWPS; it was elevated in 68 (72%) of the wells. Cadmium, lead, and cobalt were the metals that exceeded the GWPS in the largest number of wells during the second half of 1998.

Isoconcentration maps included in Volume II of this report illustrate the concentration or activity of key constituents and the extent of contamination during the second half of 1998 in each of the three hydrostratigraphic units.

Tritium, the radionuclide most frequently above the GWPS at the F-Area HWMF, had a maximum activity of 15,000 pCi/mL in Water Table well FSB 79 during third quarter 1998. Maximum activities for other key indicator radionuclides were as follows: gross alpha at 1,500 pCi/L in Water Table well FSB 79 during third quarter 1998, nonvolatile beta at 3,100 pCi/L in Barnwell/McBean well FSB 95CR during third quarter 1998, and strontium-90 at 880 pCi/L in Barnwell/McBean well FSB 95CR during third quarter 1998.

Uranium-233/234 had a maximum activity of 420 pCi/L in Barnwell/McBean well FSB 95CR during third quarter 1998, and uranium-238 had a maximum activity of 560 pCi/L in Barnwell/McBean well FSB 95CR during third quarter 1998. Technetium-99 had a maximum activity of 320 pCi/L in Barnwell/McBean well FSB112C during third quarter 1998.

Cadmium occurred at a maximum concentration of 36 µg/L in Barnwell/McBean well FSB112C during third and fourth quarter 1998. Lead was found at a maximum concentration of 230 µg/L in Barnwell/McBean well FSB 94C during fourth quarter 1998, and nitrate-nitrite (as N) exceeded the GWPS in numerous wells during the second half of 1998, with a maximum concentration of 320,000 µg/L in Water Table well FSB 79 during third quarter 1998.

Water-level maps indicate that the groundwater velocities and directions at the F-Area HWMF have remained relatively constant since the basins ceased operation in 1988. Groundwater flow in Aquifer Zone IIB<sub>2</sub> (Water Table) and Aquifer Zone IIB<sub>1</sub> (Barnwell/McBean) is generally south or southeast toward Fourmile Branch (using UTM coordinates). Flow in Aquifer Unit IIA (Congaree) is generally northwest toward Upper Three Runs Creek.

The estimated maximum groundwater velocity in Aquifer Zone IIB<sub>2</sub> (Water Table) during third quarter 1998 ranged from approximately 360 to 470 ft/year and during fourth quarter 1998 from approximately 340 to 470 ft/yr. The velocity estimate in Aquifer Zone IIB<sub>1</sub> (Barnwell/McBean) ranged from approximately 110 to 240 ft/year during third quarter 1998 and approximately 120 to 190 ft/year during fourth quarter 1998. The velocity in Aquifer Unit IIA (Congaree) was estimated at 660 ft/year during third quarter 1998 and 730 ft/year during fourth quarter 1998.

The F-Area Groundwater Remediation Wastewater Treatment Units (WTU) facility operating permit was received on April 18, 1997, and shakedown activities began upon receipt of RCRA approval on April 22, 1997. The WTUs operated in a shakedown mode through fourth quarter 1998.



## Semiannual Corrective Action Report

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### Introduction

SRS monitors groundwater quality at the F-Area Hazardous Waste Management Facility (HWMF) and provides results of this monitoring to the South Carolina Department of Health and Environmental Control (SCDHEC) semiannually as required by the Resource Conservation and Recovery Act (RCRA) permit. SRS also performs monthly sampling of the WTU effluent in accordance with Section C of the Underground Injection Control (UIC) application.

The F-Area HWMF is described in the introduction to Module III, Section C, of the RCRA permit. The F-Area HWMF well network monitors three distinct hydrostratigraphic units in the uppermost aquifer beneath the facility. The hydrostratigraphy at the F-Area HWMF is described in permit Section IIIC.H.2, and the groundwater monitoring system is described in IIIC.H.4 and Appendix IIIC-B. A detailed description of the uppermost aquifer is included in the RCRA Part B post-closure care permit renewal application for the F-Area HWMF submitted to SCDHEC in October 1993.

Sampling and analysis are conducted as required by Section IIIC.H.6 for the constituents and at the intervals specified in Appendix IIIC-D of the RCRA permit. Groundwater quality is compared to the Groundwater Protection Standards (GWPS) list in Appendix IIIC-A of the RCRA permit.

### System Evaluation

The F-Area Wastewater Treatment Unit (WTU) continued in a shakedown mode during third and fourth quarter 1998. Approximately 12.8 million gallons of groundwater were treated and injected during this period. Consistent flow rates were limited due to ongoing system testing. Full-scale operation was not initiated due to various problems with the WTU. SRS has initiated a significant effort to identify and correct the problems that have been encountered during shakedown operations.

A statistical evaluation of water quality and water level data was performed and is included in this report (Section IIIC.H.11.c.ix and Appendix F). Shewhart-CUSUM charts (Appendix F) are provided in accordance with the RCRA permit application. Due to limited operations during 1998, no significant remediation system operation effects were identified. However, several trends in water quality and water levels were identified and are discussed in Section IIIC.H.11.c.ix.

### Water Quality and Elevation Data Tables (IIIC.H.11.c.i)

Water quality and water elevation data for all F-Area HWMF wells during the second half of 1998 are presented in Table C-1 (Appendix C). Table C-1 identifies field parameters and modifiers that define laboratory accuracy and precision. Definitions of the abbreviations and the modifiers used in Table C-1, as well as descriptions of holding times, data rounding, and data qualification practices, are provided in Appendix C. Analytical results in Table C-1 are rounded to two significant digits. Constituents that exceeded either the GWPS or United States Environmental Protection Agency (US EPA)-approved holding times are denoted by symbols in columns headed ST and H, respectively.

SRS implemented a data filtering process during third and fourth quarter 1998 to better evaluate the data collected. This process qualifies certain data ("L", "R", "U", and "J") for the purposes of regulatory decision making. The data tables in Appendix C include both a column for all data collected and a column for filtered data for comparison purposes. Permission to implement the data

filtering process was requested from SCDHEC (Cook to Taylor; November 25, 1997) and granted (Taylor to Cook; April 21, 1998).

Variable-speed pumps have been installed in wells with a history of elevated analytical results for metals. Samples from these wells are collected at a slower rate to minimize turbidity, which has been associated with elevated metals levels. The chart below identifies those wells that currently have variable-speed pumps as well as those with single-speed pumps.

Variable-Speed Pumps	Single-Speed Pumps
FSB 77, 78, 78C, 79, 79C, 88D, 89D, 90D, 91D, 92C, 92D, 93D, 94C, 97C, 97D, 98C, 98D, 102C, 104D, 105C, 105DR, 106C, 107D, and 110D FSL 1D, 2D, 3D, 4D, 5D, 6D, 7D, 8D, and 9D	All remaining FSB wells and well HSB 85A have single-speed pumps

### Analytical Results

All data received from laboratories are validated and verified in accordance with Savannah River Site (SRS) and US EPA guidelines. Due to analytical limitations, curium-245/246 activities are reported as an upper limit of curium-246 activities, and uranium-233/234 activities are reported as an upper limit of uranium-234.

Data received from the laboratories for the following radionuclide analyses were rejected during third quarter 1998 due to matrix interference:

Constituent	Well Name
Cesium-137	FSB 88C, FSB 90C, FSB 90D, FSB 99D, FSB107C
Cobalt-60	FSB104D, FSB109D
Iodine-129	FSB 89C, FSB118D
Plutonium-238	FSB 78C, FSB 97C, FSB110D
Radium-228	FSB 95CR, FSB107C, FSB110C
Thorium-228	FSB 93D, FSB 94C, FSB 98D, FSB107C, FSB112C, FSB112D

Data received from the laboratories for the following radionuclide analyses were rejected during third quarter 1998 because surrogate or tracer spike recovery results were not within the control limits:

Well Name	Constituents
FSB 78C	Americium-241, Curium-242, Curium-243/244, and Curium-245/246.
FSB 92C	Americium-241, Curium-242, Curium-243/244, and Curium-245/246.

The following wells had maintenance problems for the first sampling event; maintenance was performed, and the wells were successfully sampled on the second date listed, with no loss of permit-required data.

Well Name	Dates of Failed Sampling Attempts	Dates of Successful Sampling Attempts
FSB 95CR	7/9/98; 8/4/98	8/25/98
FSB 98C	7/9/98	8/25/98
FSL 2D	7/9/98	7/20/98
FSL 3D	7/9/98	7/20/98
FSB 87D	10/27/98	12/7/98
FSB 91D	10/9/98	12/21/98
FSL 1D	10/28/98	12/30/98

Wells FSL 3D and FSL 8D were purged through the sample port to lower turbidity for fourth quarter 1998 sampling.

#### **Appendix IX Analyses**

During third quarter 1998, Appendix IX analyses were performed as required by the RCRA permit. Beryllium in wells FSB 94C and 95CR was the only constituent not already listed on the RCRA permit's GWPS list that was reported above detection limit in F Area. Confirmation sampling was performed during January 1999, and laboratory results are pending.

#### **Water Elevations**

Synchronous water-level elevations were measured during third quarter and fourth quarter 1998 in compliance with Section IIIC.H.7 of the RCRA permit. Potentiometric maps are provided in Volume II. A significant water level increase observed in most wells during the spring of 1998 is likely due to increased precipitation and associated recharge during this time period. Compared to the uppermost aquifer zone, the lower aquifer zones generally have smaller, yet more gradual increases, as would be expected from recharge effects.

#### **Hydrographs (IIIC.H.11.c.ii)**

Hydrographs showing the water elevations for the F-Area HWMF are provided in Appendix E. Hydrograph data include synchronous water level measurements and water level measurements taken during sampling. Clustered wells are shown on a single graph.

A significant water level increase in most wells in the spring of 1998 is likely due to increased precipitation and associated recharge during this time period. See section IIIC.H.11.c.xiii. Compared to the uppermost aquifer zone, the lower aquifer zones generally have smaller, more gradual increases as would be expected from recharge effects.

#### **Time vs. Concentration Plots (IIIC.H.11.c.iii)**

Appendix D contains time series plots for cadmium, lead, nitrate (or nitrate/nitrite), gross alpha, nonvolatile beta, strontium-90, technetium-99, tritium, uranium-233/234, and uranium-238 for selected wells. The wells were selected to delineate the extent of the constituent distribution, to monitor the migration of the constituents, and to follow trends of constituents present at high levels. Constituents reported as below detection are not plotted.

### **Isoconcentration Maps (IIIC.H.11.c.iv)**

Isoconcentration maps for strontium-90, technetium-99, uranium-233/234, and uranium-238 in the three hydrostratigraphic units during third quarter and for cadmium, lead, nitrate (or nitrate-nitrite), gross alpha, nonvolatile beta, and tritium during fourth quarter 1998 are presented in Volume II.

### **Potentiometric Maps (IIIC.H.11.c.v)**

Piezometric and potentiometric surface maps for the monitored water-bearing units during third and fourth quarters 1998 are located in Volume II. The maps illustrate groundwater flow patterns beneath the F-Area HWMF for third and fourth quarter 1998.

### **Potentiometric Cross-Sections and Isoconcentration Cross-Sections (IIIC.H.11.c.vi)**

Potentiometric and isoconcentration cross-section figures for permit-required constituents are located in Appendix B.

### **Groundwater Velocity and Direction (IIIC.H.11.c.vii)**

Horizontal groundwater velocity calculations are used to estimate the transport rate of constituents originating from the F-Area HWMF. Velocities in Aquifer Zone IIB<sub>2</sub> (Water Table) and Aquifer Zone IIB<sub>1</sub> (Barnwell/McBean) are calculated along two flow paths. The flow paths, designated flow paths A and B, characterize the approximate maximum and minimum groundwater velocity within these units in areas associated with the basins. The velocity in Aquifer Unit IIA (Congaree) is calculated along a single flow path because the velocity within this unit is generally more uniform than in the overlying units.

Groundwater velocity is estimated using the following equation:

$$\text{Flow (ft / day)} = \frac{\text{Hydraulic Conductivity (ft / day)}}{\text{Porosity}} \times \frac{dh \text{ (ft)}}{dl \text{ (ft)}}$$

The value  $dh$  is the difference in head, and  $dl$  is the length of the flow path. Flow path length is calculated to the nearest 50 ft. Maximum velocity per day is calculated to two significant digits, then multiplied by 365 and rounded to two significant digits for the velocity per year. Velocity estimates vary depending on the vertical gradient between wells, the size of the area under consideration, the number of data points, and the length and location of the flow path. Because these calculations are based on inferred or estimated parameters, groundwater velocity estimates are accurate to an order of magnitude only.

Maximum horizontal velocity estimates for the hydrostratigraphic units during third and fourth quarter are provided in Table 1.

**Table 1. Horizontal Groundwater Velocities (ft/year) in the Hydrostratigraphic Units beneath the F-Area HWMF**

	Aquifer Zone IIB <sub>2</sub> (Water Table)	Aquifer Zone IIB <sub>1</sub> (Barnwell/McBean)	Aquifer Unit IIA (Congaree)
K <sub>n</sub> (ft/day)	40	10.4	65
Effective porosity	20%	20%	20%
dh/dl	Varies	varies	varies
Velocity (3Q98)	360–470	110–240	660
Velocity (4Q98)	340–470	120–190	730

The hydraulic conductivity (K<sub>n</sub>) values represent regional average hydraulic conductivities and may vary locally.

Flow in Aquifer Zone IIB<sub>2</sub> (Water Table) and Aquifer Zone IIB<sub>1</sub> (Barnwell/McBean) was south along both paths during third and fourth quarter 1998. Flow in Aquifer Unit IIA (Congaree) was west during third quarter 1998 and northwest toward Upper Three Runs Creek during fourth quarter.

### Extent and Severity of Groundwater Contamination (IIIC.H.11.c.viii)

Constituents that exceeded the GWPS (Appendix A) during third and fourth quarter 1998 in the F-Area HWMF wells are denoted in Table C-1 (Appendix C).

As shown in Table C-1, the following constituents or summations exceeded the GWPS during the second half of 1998 in samples from monitoring wells at the F-Area HWMF: beta dose, cadmium, cobalt, lead, mercury, nickel, nitrate-nitrite (as N), vanadium, zinc, bis(2-ethylhexyl) phthalate, trichloroethylene, trichlorofluoromethane, gross alpha, nonvolatile beta, sum of alpha emitters, sum of beta emitters, total radium, and tritium.

In addition, the following radionuclides individually exceeded the standard for either total alpha emitters or total beta emitters: americium-241, cesium-137, curium-243/244, iodine-129, radium-226, radium-228, strontium-90, technetium-99, uranium-233/234, uranium-235, and uranium-238.

The extent and severity of groundwater contamination is delineated by the contours above the GWPS on the isoconcentration maps (Volume II). Tritium is the most widespread contaminant and exceeds the GWPS in all three aquifers (Maps 28–30 in Appendix H). The highest activities are downgradient of the basins in the Water Table and the Barnwell/McBean aquifer zones. Tritium is also present in the Water Table aquifer zone along the F-Area Inactive Process Sewer Line to the basins. Tritium is elevated in some Congaree wells between the basins and Fourmile Branch.

The extent of the nitrate-nitrite (as N) plume (Maps 16–18) is very similar to the tritium plume. The cadmium, gross alpha, and nonvolatile beta plumes (Maps 1–6 and 19–21) in the Water Table and Barnwell/McBean are similar in shape but less extensive than the tritium plume.

Individual radionuclides are reported in the Water Table and Barnwell/McBean aquifer zones between the basins and Fourmile Branch. These include strontium-90, technetium-99, uranium-233/234, and uranium-238 (Maps 22–27 and 31–36). Uranium-233/234 and uranium-238 are both reported as elevated in one Congaree well south of the basins.

Lead is elevated in several Water Table and Barnwell/McBean wells (Maps 10–12) near the basins. There is no clear pattern to the distribution of elevated lead.

### **Background Results**

Wells FSB 76C and 108D and well HSB 85A are the background wells for the F-Area HWMF. These wells are screened in the Barnwell-McBean, Water Table, and Upper Congaree aquifer zones, respectively. Although vanadium appears to have exceeded GWPS in background well HSB 85A during third quarter 1998, the detection is not considered valid. The well is a background well screened in the Congaree aquifer, there has been no trend of vanadium contamination in the well, the laboratory blank was contaminated, and the sample had to be diluted.

### **Statistical Evaluation (IIIC.H.11.c.ix)**

The F-Area RCRA Permit requires an annual statistical evaluation of water quality and water level data to assess significant changes or impacts associated with operation of the F-Area WTU. Constituents listed in Appendix IIIC-A of the RCRA permit must be evaluated in all Point of Compliance (POC) wells and in a representative number of plume assessment wells.

Control charts have historically been used in industry and laboratories to monitor processes to determine whether the monitoring data shows a constituent either "in control" or "out of control." For groundwater monitoring, control charts can be used to monitor water quality data and to flag anomalous results. The statistical procedure used by SRS to assess the effectiveness of corrective action is the Shewhart-CUSUM control chart, detailed in Appendix F. The chart will be used to detect both increasing and decreasing trends and to identify either sudden incursions (contaminant slugs) or steady drifts (changes in plume concentration or size). Water level data will be evaluated similarly.

The selected wells for this statistical analysis include all POC wells (as listed in Table IIIC-B of the RCRA permit) and a representative number of plume wells, as follows: FSB102C, 104C, 104D, 110C, 110D, 112C, 112D, 117D, 121C, and 121D.

For this evaluation, background samples consisted of all samples from the first quarter of 1991 through the last quarter of 1995. The end of 1995 was chosen as a background cutoff date to provide adequate background sample quantities and to provide control plot points for at least one year prior to startup of remediation operations.

### **Plotting of Results**

Shewhart-CUSUM control plots are given in Appendix F for those constituent/well pairings that made it through the data qualification and treatment process described above. To maintain clarity and uniformity in all the control plots, the y-axis ranges have been set between -6 and +6 standardized units.

Due to the limited operation of the WTU and the minimal amount of available trend data since the background time period, the analysis of the control chart statistics cannot be extensive, but some general comments can be made concerning the indications of gradual increases/decreases, sudden breakthroughs, or sudden drops.

In general, the charts do not show any effect from the shakedown operations. There are a number of wells that show statistically significant decreases of tritium and nitrate-nitrite (as N), but at the same time, there are also a number of wells that show statistically significant increases of these same constituents. There is no spatial correlation evident to these increases or decreases.

### Evaluation of Water Quality and Water Elevation Data (IIIC.H.11.c.x)

Due to the limited remediation operations, zone of capture and drawdown have not yet been determined. No significant trends or changes have been attributed to the operation of the WTU.

### Volume and Rates of Groundwater Pumped (IIIC.H.11.c.xi)

Table 2 summarizes the pump rates, monthly volumes, and total volumes pumped from each extraction well during third and fourth quarter 1998. The pump rates represent the average pump rate for each well. The individual well volumes (and consequently, the average flow rates) are estimated due to instrument errors. The well totals are based on recorded well performance (PLC) and extraction totals. The total volumes extracted and injected are based on the totalizers on the extraction and injection tanks. Data are collected daily from the totalizers.

**Table 2. Volume Pumped (gallons) During the Second Half of 1998**

Well	Rate (gpm)	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	6-Month Total
FEX 1	8.4	48,938	331,845	222,466	450,807	136,178	122,640	1,312,874
FEX 2	10.7	164,651	397,407	215,922	271,842	275,811	162,448	1,488,081
FEX 3	10.7	176,628	434,270	274,811	282,174	156,891	153,640	1,478,414
FEX 4	9.2	114,867	331,285	268,267	275,274	153,936	154,840	1,298,469
FEX 5	4.8	41,172	102,426	176,664	185,828	97,681	101,740	705,511
FEX 6	9.0	152,042	315,466	196,293	258,078	162,827	158,740	1,243,446
FEX 7	8.3	102,823	307,277	202,836	309,887	153,936	123,140	1,199,899
FEX 8	6.7	69,912	204,852	183,575	295,530	130,656	110,040	994,565
FEX 9	5.4	16,442	221,230	189,750	137,637	156,891	85,140	807,090
FEX 10	8.6	127,500	413,785	255,181	378,742	124,331	-	1,299,539
FEX 11	9.2	198,425	409,703	261,724	289,573	130,242	-	1,289,667
Total		1,213,400	3,469,546	2,447,489	3,135,372	1,679,380	1,172,368	13,117,555

### Volume and Rates of Groundwater Injected (IIIC.H.11.c.xii)

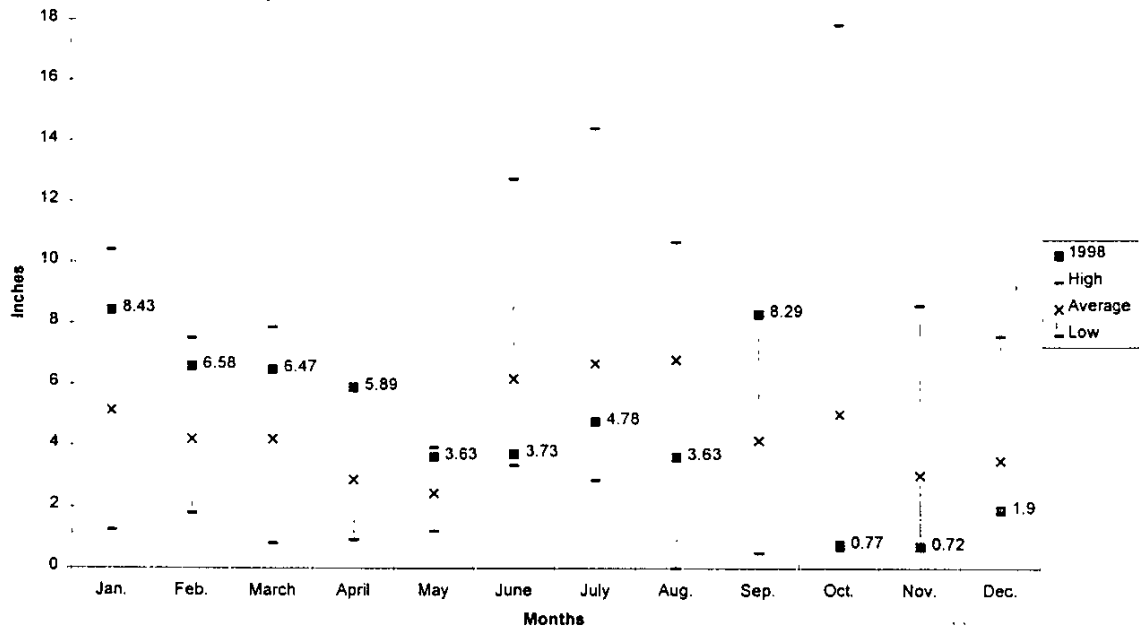
Table 3 summarizes the pump rates, monthly volumes, and total volumes pumped to each injection well during third and fourth quarter 1998. The pump rates represent the average pump rate for each well. The individual well volumes (and consequently, the average flow rates) are estimated due to instrument errors. The well totals are based on recorded well performance (PLC) and injection totals. The total volumes extracted and injected are based on the totalizers on the extraction and injection tanks. Data are collected daily from the totalizers. The difference in total volume extracted (Table 2) and total volume injected (Table 3) is due to the time delay between collecting extraction and injection readings as well as water retention in the WTU.

**Table 3. Volume Injected (gallons) During the Second Half of 1998**

Well	Rate (gpm)	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	6-Month Total
FIN 1	12.3	129,356	507,114	348,066	435,420	237,497	145,119	1,802,572
FIN 2	9.3	115,739	332,247	257,187	335,710	180,225	122,517	1,343,625
FIN 3	9.1	113,546	342,729	238,322	313,650	187,434	118,817	1,314,498
FIN 4	12.2	125,952	489,628	377,916	418,660	237,197	140,717	1,790,070
FIN 5	8.2	119,144	167,812	231,636	324,305	201,852	122,517	1,167,266
FIN 6	10.9	130,760	447,498	232,636	440,800	223,179	135,617	1,610,490
FIN 7	9.0	105,527	360,327	281,784	276,750	158,598	109,317	1,292,303
FIN 8	7.0	124,952	209,639	186,264	206,640	151,389	90,217	969,101
FIN 9	5.3	119,050	132,788	143,280	199,260	50,395	76,817	721,590
FIN 10	5.0	61,274	251,718	175,578	191,880	79,299	-	759,749
Total		1,145,300	3,241,500	2,472,669	3,143,075	1,707,065	1,061,655	12,771,264

### Rainfall and Recharge (IIIC.H.11.c.xiii)

Figure 1 illustrates the rainfall data for F Area during third and fourth quarter 1998. Recharge to groundwater is estimated to be approximately 30% of rainfall in the General Separations Area.



**Figure 1. Rainfall Data for F Area During Third and Fourth Quarter 1998**



### **Summary of System Downtime (IIIC.H.11.c.xiv)**

Significant downtime to the facility was incurred because of lightning strikes in the well fields or in the vicinity of the control room programmable logic controller (PLC). The electrical surges through the system resulted in damage to well instrumentation, PLC input/output modules, and miscellaneous controls. Initial modifications consisted of the addition of in-line fuses to help protect electrical components. In addition, SRS is currently designing an improved lightning protection system. The additional fuses have been effective in reducing much of the electrical damage of lightning strikes. The design is complete and scheduled for installation during second quarter 1999.

Vibration problems that have been identified during this time period will be resolved in the near future. The first area of concern is the vibration induced into the system by the positive displacement, piston-type, reverse osmosis (RO) pumps. To date, no failures or problems have been directly attributed to this vibration in F Area. A vibration analysis is being conducted and will be followed by recommendations for design modifications, as applicable. The modifications are scheduled for completion in third quarter 1999. The second area of concern is the vibration caused by the air-driven diaphragm pumps used for sludge transfer from the sludge collection tanks (flocculation tank, clarifier, or filtrate return tank) to the filter press. This vibration has contributed to a failure of the surge protector for the large diaphragm pump in the sludge transfer system. SRS is currently designing modifications to the sludge transfer systems to reduce vibration and improve reliability. The estimated schedule for completion of this modification is second quarter 1999.

The F-Area facility was limited to one-RO operation due to problems associated with the clarification and sludge removal systems. Most operations and maintenance downtime problems were due to one of the following causes:

- Clogging, pump, or flow problems with the polymer feed system
- Clogging, pump, or flow problems with the ferric chloride feed system
- Clogging, pump, or flow problems with the caustic (NaOH) feed system
- Excessive carryover of the flocculant and precipitants through the clarifier due to incomplete chemical reaction and/or settling
- pH probe coating or calibration problems
- Removal of process solids caking on top of the medium in the roughing filters
- Fouling or plating of the flow control valve in the chemical feed line due to iron settling out of solution during low-flow or no-flow operating conditions.

SRS assumed operation of the WTU from the subcontractor on January 1, 1999. Upon transition to SRS operation, several modifications to improve process efficiency and reliability are anticipated.

Appendix G summarizes the operations activities and downtime for third and fourth quarter 1998.

### **Minor Modifications to the System (IIIC.H.11.c.xv)**

Subsequent to receiving the wastewater permit to operate the modified treatment system on June 24, 1998, it was determined that numerous process changes would be required to correct the problems associated with the effective operation of the treatment system. These approved temporary process changes included: installation of additional roughing filters, new PolyBlend addition system, and numerous piping reconfigurations. A permit application modification for the

F-Area WTU, which incorporated these and other temporary changes, was submitted to SCDHEC on September 30, 1998. A permit to construct was issued on November 10, 1998. Implementation of the permanent changes will commence upon receipt of the permanent roughing filters.

Permanent access platforms for the ion exchangers were also fabricated and installed.

### **Effectiveness of the Corrective Action System (IIIC.H.11.c.xvi)**

The F-Area WTU operated in a shakedown mode during the third and fourth quarter 1998 but has not commenced full-scale operation. A statistical analysis was completed on the POC wells and a representative number of plume assessment wells, and this information will serve as a baseline for future reports. Due to the limited operations thus far, no direct impact to groundwater from operation of the WTU has been established. The statistical analysis identified groundwater trends for a few constituents discussed in Section IIIC.H.11.b.ix.

### **Underground Injection Control (UIC) Sampling Results**

SRS collected samples to determine compliance with UIC standards as required by the operating permit issued on April 17, 1997. The results of these samples are presented in Appendix C.

The F-Area WTU was sampled on July 30, August 13, September 29, October 19, November 17, and December 21, 1998, for the suite of contaminants specified in the current UIC permit. Results were reported to SCDHEC both by electronic submittal and by letter. Whenever an exceedence was confirmed, SRS immediately notified SCDHEC. In each case, SCDHEC granted approval to restart/continue operating the unit based on proposed corrective actions.

Starting with the October 1998 samples, a change was implemented in the reporting format for UIC sampling results. SRS replaced the AN95 reporting format with the AN98, the most significant change being the implementation of a sample-specific quantitation limit (ssEQL) for radionuclide results. Radionuclides were previously reported using the method detection limit as the quantitation limit. Reported detection limits that appear higher for October, November, and December may be attributable to this change. The UIC permit divides the compliance suite of constituents into four sections: Section I, Inorganics; Section II, Organics; Section III, Radionuclides; and Section IV, Radionuclides. Section IV includes speciated radionuclide results, and Section III reports results for gross alpha, gross (nonvolatile) beta, and total radium.

None of the Section I or Section II constituents exceeded their respective regulatory standards during third and fourth quarter 1998. Only barium, cobalt, and copper regularly exceeded their respective quantitation limits during the last half of 1998.

Gross alpha exceeded its limit of 15 pCi/L in November, and although the reported quantitation limit was also higher than 15 pCi/L in December, the raw sample result of 9.56 pCi/L indicated that there was no actual exceedence. Gross (nonvolatile) beta and total radium were below their respective compliance limits of 50 pCi/L and 5 pCi/L for all six months.

The alpha-emitting radionuclides, curium-242, curium-243/244, curium-246, plutonium-238, plutonium-239/240, thorium-230, and thorium-232, were all below their respective detection limits during third and fourth quarter 1998. Americium-241 exceeded its detection limit in July 1998 and November 1998 but was well below the sum of alphas compliance limit of 15 pCi/L in both of those months. Radium-226 exceeded its detection limit during July and August but was less than the compliance limit of 5 pCi/L for total radium in both of those months. Thorium-228 exceeded its detection limit during September but remained well below the compliance standard for the sum of alpha contributors. Uranium-235 exceeded its detection limit in August, September, and November but remained well below the compliance limit for the sum of alphas. Uranium-233/234

and uranium-238 exceeded their respective detection limits during the last half of 1998, but both remained below their compliance limit for the sum of alpha contributors. Consequently, the sum of alpha contributors exceeded the compliance limit in November at 24.08 pCi/L but remained below the 15 pCi/L standard in each of the other five months. Overall, the sum of alpha contributors decreased or remained steady at acceptable levels through October, increased in November, and decreased in December below the compliance limit.

Results for the beta-emitting radionuclides cesium-137 and cobalt-60 were both below their respective detection limits during the last half of 1998. Carbon-14 exceeded its detection limit in September, October, and December. The October result was 60.1 pCi/L, above the compliance limit of 50 pCi/L for the sum of beta contributors. However, results during the following months were below the detection limit; therefore, no exceedence of carbon-14 was confirmed during third and fourth quarters. Radium-228 exceeded its detection limit only during July but was below its compliance limit of 5 pCi/L for total radium. Technetium-99 exceeded its detection limit during four of the six months (the October result was rejected), but did not exceed the compliance limit of 50 pCi/L for the sum of betas. Iodine-129 was detected in all six months, and was elevated above the 50 pCi/L compliance limit for the sum of beta contributors during August, September, and November. The September result was a confirmed exceedence. Strontium-90 exceeded its detection limit in July, August, September, and December. It exceeded its compliance limit of 8 pCi/L during July, August, and September but remained below that limit in December. Elevated results in each of the first three months represented confirmed exceedences. However, modifications performed on the F-Area WTU resulted in significantly lower strontium-90 results during fourth quarter 1998. The sum of beta contributors exceeded the compliance limit in each month during the last half of 1998, and every month was a confirmed exceedence. All results ranged between 70 and 100 pCi/L. The most common contributors to that sum were carbon-14, iodine-129, technetium-99, and strontium-90. Overall, the sum of the beta contributors remained elevated over the 50 pCi/L standard during the last half of 1998, with iodine-129, carbon-14, and technetium-99 replacing each other as the major contributor in any given month. Based on reported levels, difficulty of treatment, and health risk, the most problematic constituent at present is iodine-129. Carbon-14 and technetium-99 are lower risks to human health and appear elevated relative to other constituents because of their high detection limits. Modifications to the unit designed to control strontium-90 appear to have been successful relative to the limited operations through the end of 1998.

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# **Appendix A**

## **Regulatory Standards**

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**Table A-1. Groundwater Protection Standard**

Established for the F-Area Hazardous Waste Management Facility by the 1995 RCRA Renewal Permit (SCDHEC, 1995).

Analyte	Concentration/ Activity Limit	Unit
<b><i>Inorganic Constituents</i></b>		
Antimony	6	µg/L
Arsenic	50	µg/L
Barium	2,000	µg/L
Cadmium	5	µg/L
Chromium	100	µg/L
Cobalt	3a	µg/L
Copper	1,300	µg/L
Cyanide	20b	µg/L
Lead	15	µg/L
Mercury	2	µg/L
Nickel	100	µg/L
Nitrate	10,000	µg/L
Selenium	50	µg/L
Silver	50	µg/L
Thallium	2	µg/L
Vanadium	3.5a	µg/L
Zinc	5,000	µg/L
<b><i>Organic Constituents</i></b>		
Benzene	5	µg/L
Bis(2-ethylhexyl) phthalate	10c	µg/L
Dichloromethane (methylene chloride)	5	µg/L
Phenols	2d	µg/L
Tetrachloroethylene	5	µg/L
Trichloroethylene	5	µg/L
Trichlorofluoromethane	5e	µg/L
<b><i>Radionuclide Constituents</i></b>		
Gross alpha	15	pCi/L
Nonvolatile beta	50f	pCi/L
Tritium	20,000	pCi/L
Americium-241	Sum of alphas <15 pCi/L	pCi/L
Cesium-137	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Cobalt-60	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Curium-242	Sum of alphas <15 pCi/L	pCi/L
Curium-243/244	Sum of alphas <15 pCi/L	pCi/L
Curium-245/246	Sum of alphas <15 pCi/L	pCi/L
Iodine-129	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L

Analyte	Concentration/ Activity Limit	Unit
Plutonium-238	Sum of alphas <15 pCi/L	pCi/L
Plutonium-239/240	Sum of alphas <15 pCi/L	pCi/L
Radium-226	Total radium <5 pCi/L	pCi/L
Radium-228	Sum of beta dose <4 mrem/yr and <50 pCi/L and total radium <5 pCi/L	pCi/L
Strontium-90	Sum of beta dose <4 mrem/yr and <50 pCi/L and strontium-90 <8 pCi/L	pCi/L
Technetium-99	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Thorium-228	Sum of alphas <15 pCi/L	pCi/L
Thorium-230	Sum of alphas <15 pCi/L	pCi/L
Thorium-232	Sum of alphas <15 pCi/L	pCi/L
Total alpha-emitting radium9	5	pCi/L
Total radium (radium-226 plus radium- 228)	5	pCi/L
Uranium-233/234	Sum of alphas <15 pCi/L	pCi/L
Uranium-234	Sum of alphas <15 pCi/L	pCi/L
Uranium-235	Sum of alphas <15 pCi/L	pCi/L
Uranium-238	Sum of alphas <15 pCi/L	pCi/L

- 
- a Concentrations are observed background levels.
  - b Concentration is the practical quantitation limit (PQL) for EPA Method 335.2 (used by WA) and 335.3 (used by GE).
  - c Concentration is the PQL for EPA Method 8270 as published in 40CFR Part 264, Appendix IX.
  - d Concentration is the PQL for EPA Method 420.1 (used by GE) and 420.2 (used by WA).
  - e Concentration is the Appendix IX PQL for EPA Method 8240.
  - f This is the screening level above which providers of public drinking water should perform analyses for specific man-made radionuclides. The standard for the total dose equivalent from all such radionuclides is 4 mrem/yr.
  - g Results reported by this analysis, which does not distinguish among radium-223, radium-224, and radium-226, are assumed to be primarily radium-226 and are compared to the GWPs for total radium.



**Table A-2. Regulatory Limits for UIC Permitted Constituents**

Constituent	Reg. Limit	Unit
<b>Section I, Inorganics</b>		
Arsenic	µg/L	50
Barium	µg/L	2,000
Cadmium	µg/L	5
Chromium	µg/L	100
Lead	µg/L	50
Mercury	µg/L	2
Selenium	µg/L	50
Silver	µg/L	50
<b>Section II, Organics</b>		
Antimony	µg/L	6
Cobalt	µg/L	140
Copper	µg/L	1,300
Cyanide	µg/L	200,000
Benzene	µg/L	5
Bis(2-ethylhexyl) phthalate	µg/L	140
Methylene chloride (Dichloromethane)	µg/L	5
Nickel	µg/L	100
Phenol	µg/L	10
Tetrachloroethylene	µg/L	5
Thallium	µg/L	2
Tin	µg/L	50
Trichloroethylene	µg/L	5
Trichlorofluoromethane	µg/L	100
Vanadium	µg/L	49
Zinc	µg/L	5,000
<b>Section III, Radionuclides</b>		
Gross alpha	pCi/L	15
Gross beta	pCi/L	50
Total radium (226+228)	pCi/L	5
<b>Section IV, Radionuclides</b>		
Americium-241	pCi/L	SOA
Cesium-137	pCi/L	SOB
Curium-242	pCi/L	SOA

Constituent	Reg. Limit	Unit
Curium-243/244	pCi/L	SOA
Curium-246	pCi/L	SOA
Carbon-14	pCi/L	SOB
Cobalt-60	pCi/L	SOB
Iodine-129	pCi/L	SOB
Plutonium-238	pCi/L	SOA
Plutonium-239/240	pCi/L	SOA
Nickel-63	pCi/L	SOB
Radium-226	pCi/L	SOR
Radium-228	pCi/L	SOR
Strontium-90	pCi/L	SOB
Technetium-99	pCi/L	SOB
Thorium-228	pCi/L	SOA
Thorium-230	pCi/L	SOA
Thorium-232	pCi/L	SOA
Uranium-233/234	pCi/L	SOA
Uranium-234	pCi/L	SOA
Uranium-235	pCi/L	SOA
Uranium-238	pCi/L	SOA

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# **Appendix B**

## **Figures**

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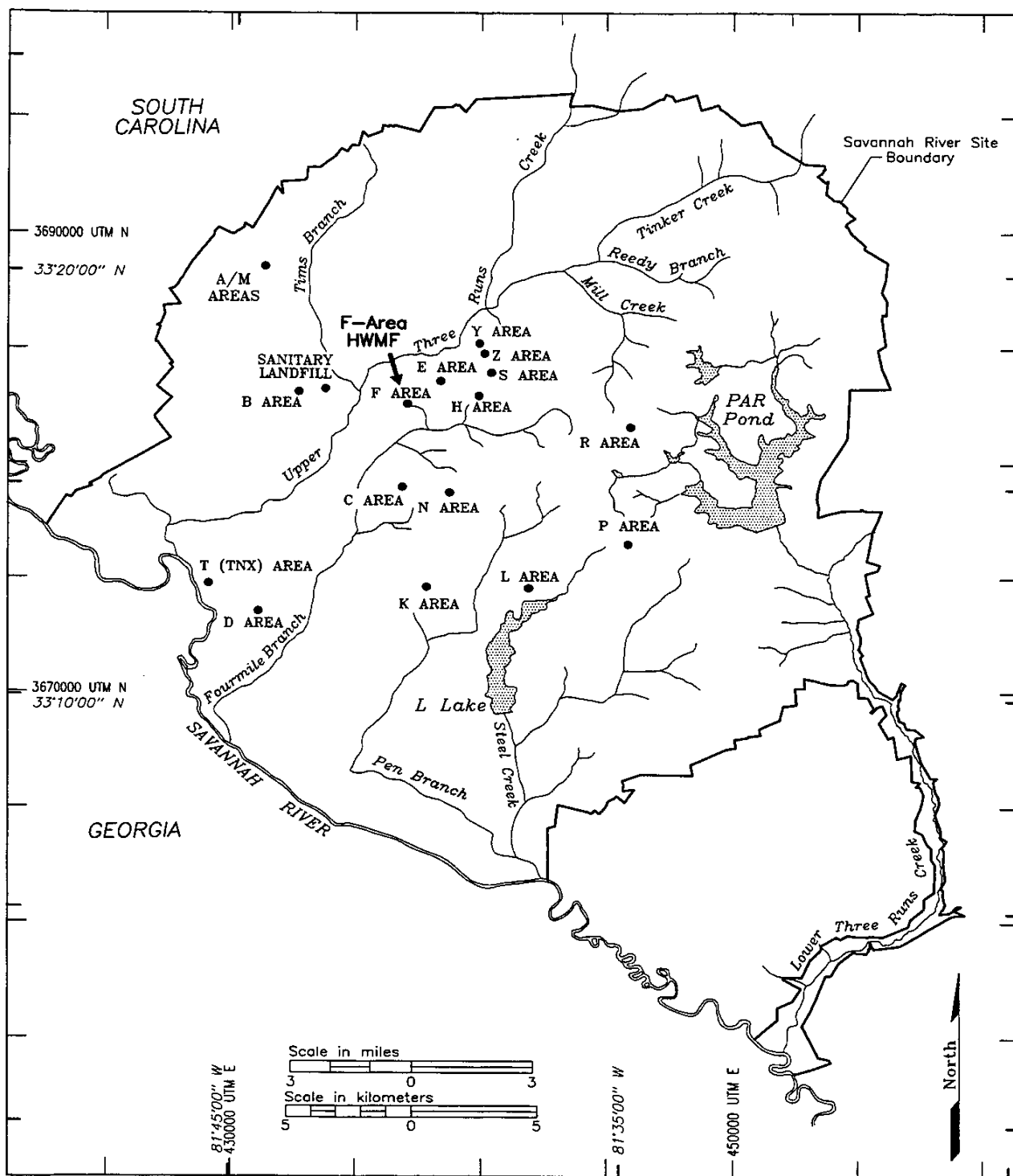


Figure 1. Location of the F-Area HWMF at the Savannah River Site

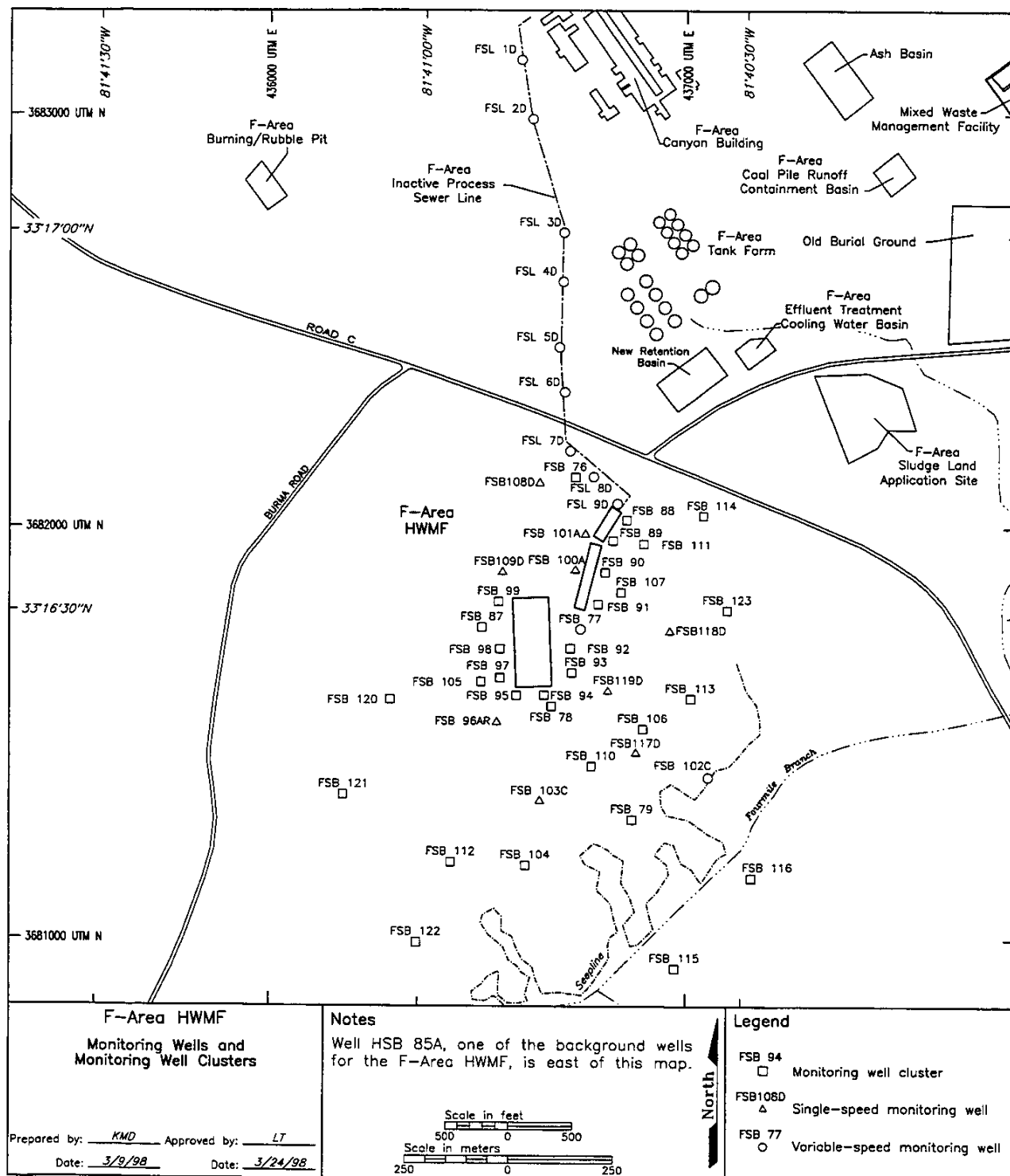


Figure 2. Location of the Groundwater Monitoring Wells at the F-Area HWMF

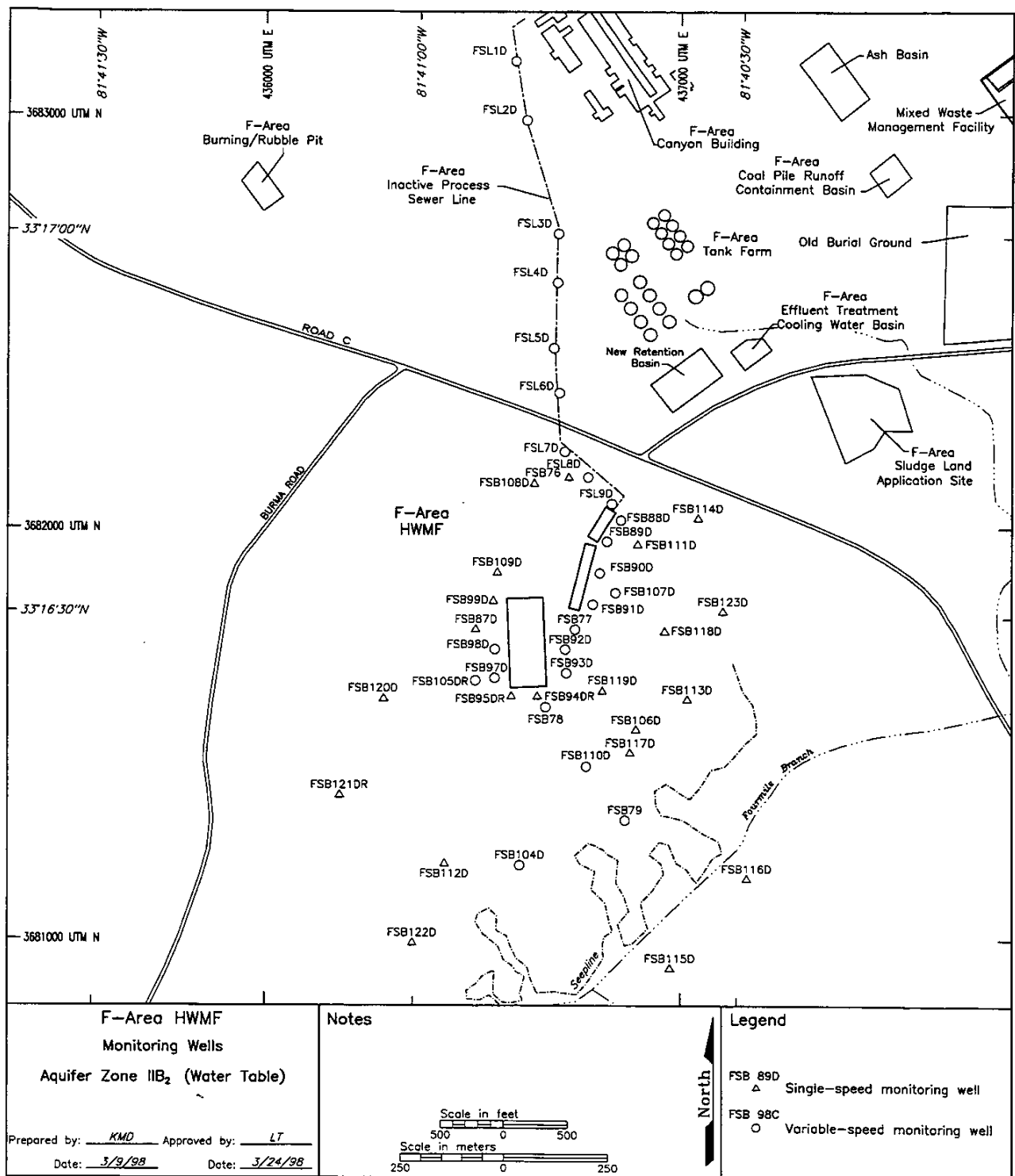
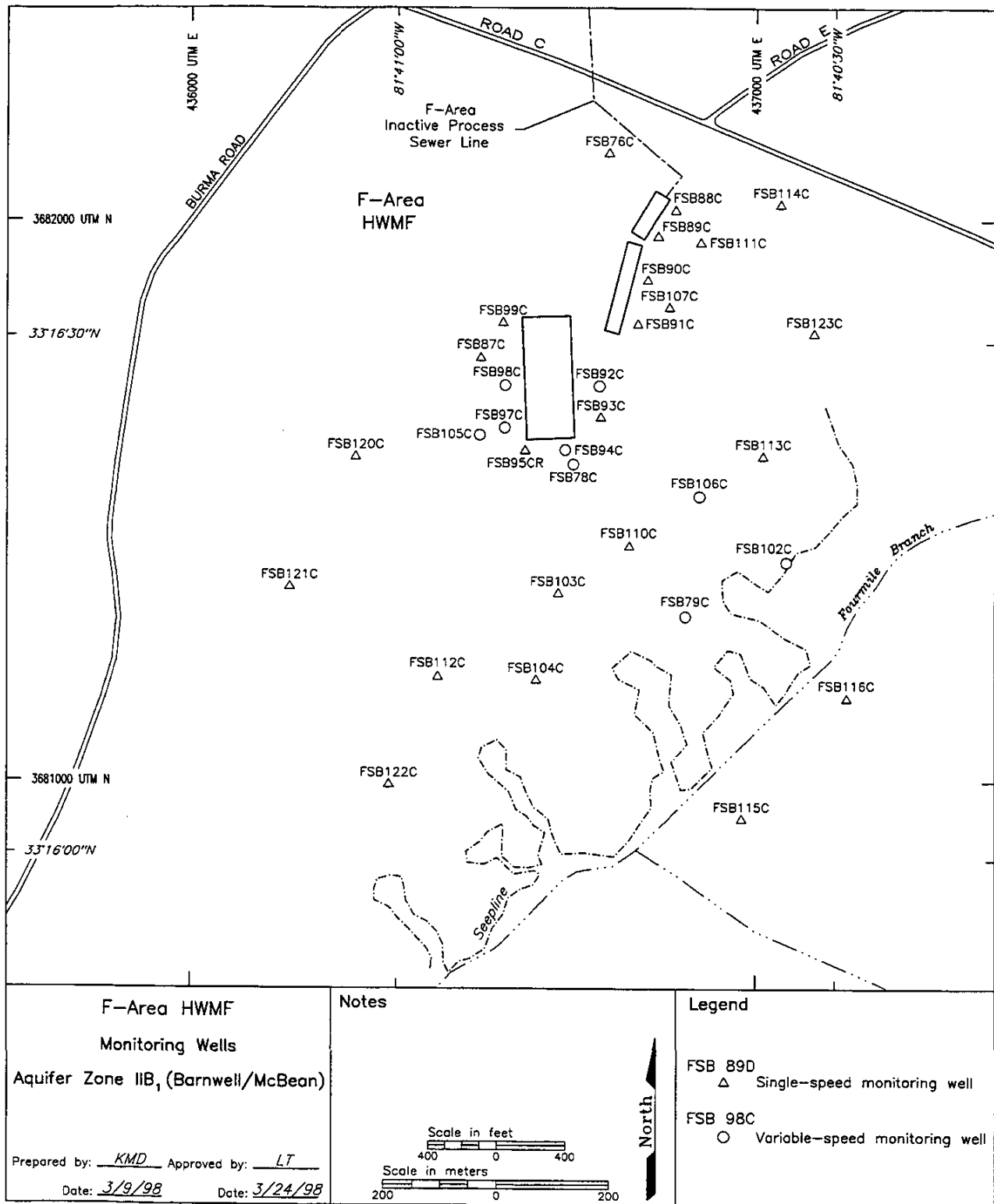


Figure 3. Location of Aquifer Zone IIB<sub>2</sub> (Water Table) Monitoring Wells at the F-Area HWMF



**Figure 4. Location of Aquifer Zone IIB<sub>1</sub> (Barnwell/McBean) Monitoring Wells at the F-Area HWMF**



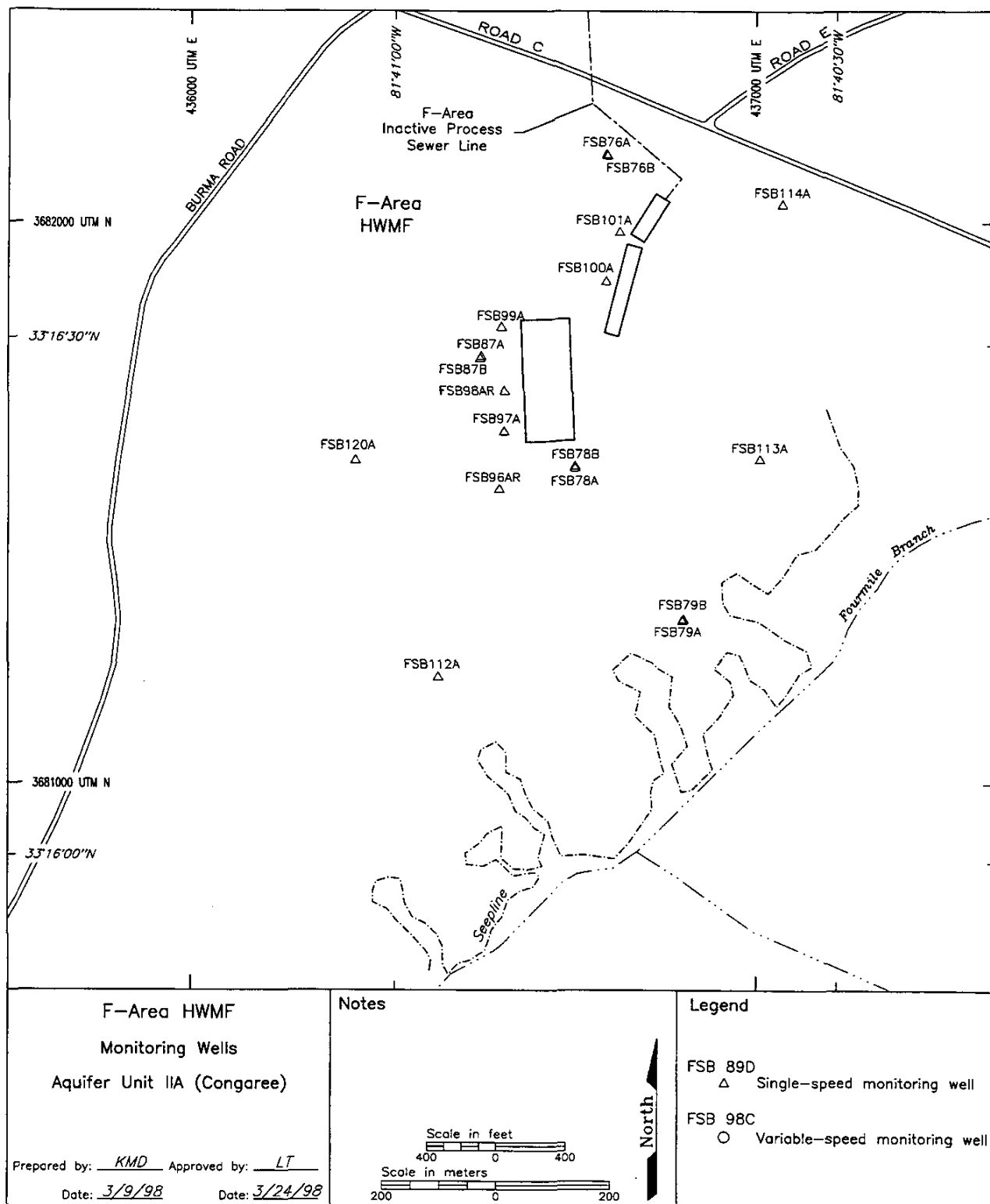


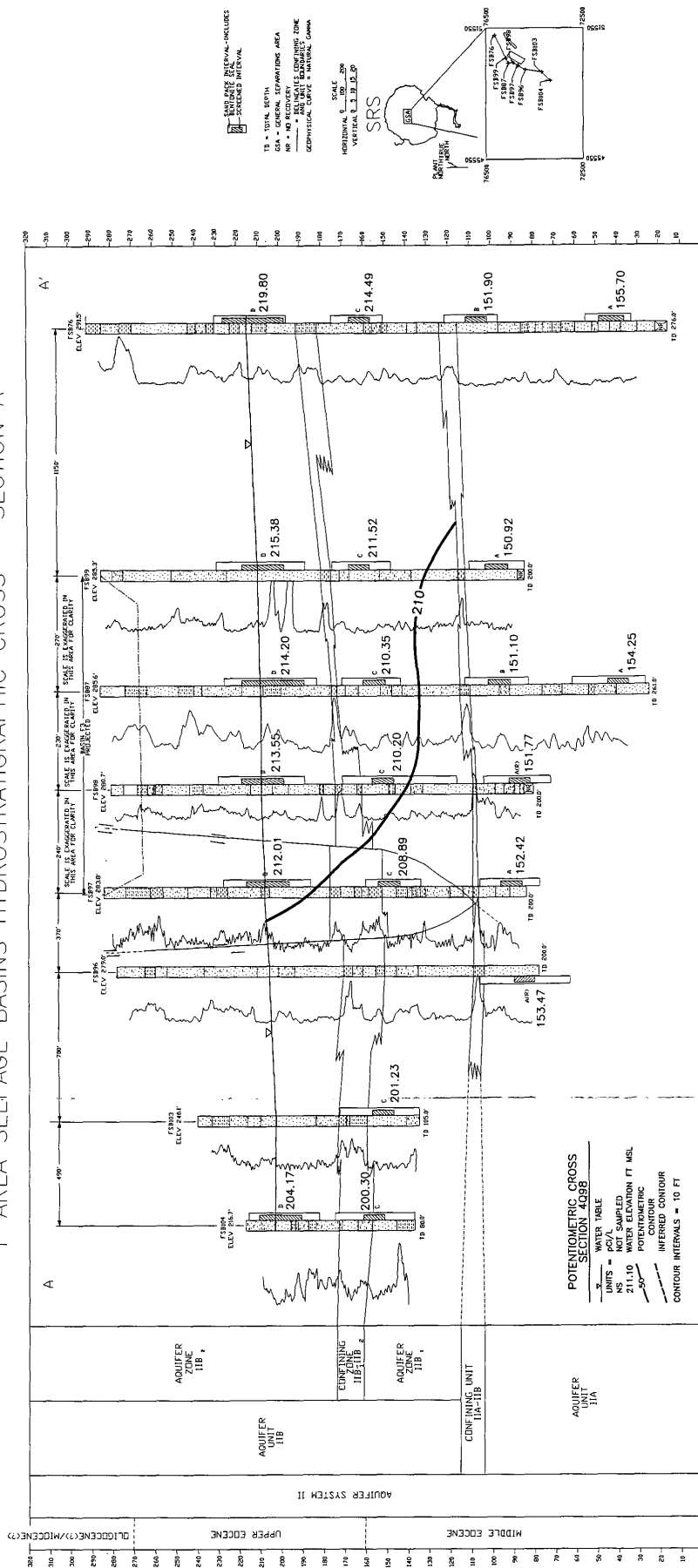
Figure 5. Location of Aquifer Unit IIA (Congaree) Monitoring Wells at the F-Area HWMF

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**Figure 6. Hydrogeologic Cross-Section Showing Potentiometric Surfaces at the F-Area HWMF, Fourth Quarter 1998**

**Figure 7. Hydrogeologic Cross-Section Showing Cadmium Concentrations at the F-Area HWMF, Fourth Quarter 1998**

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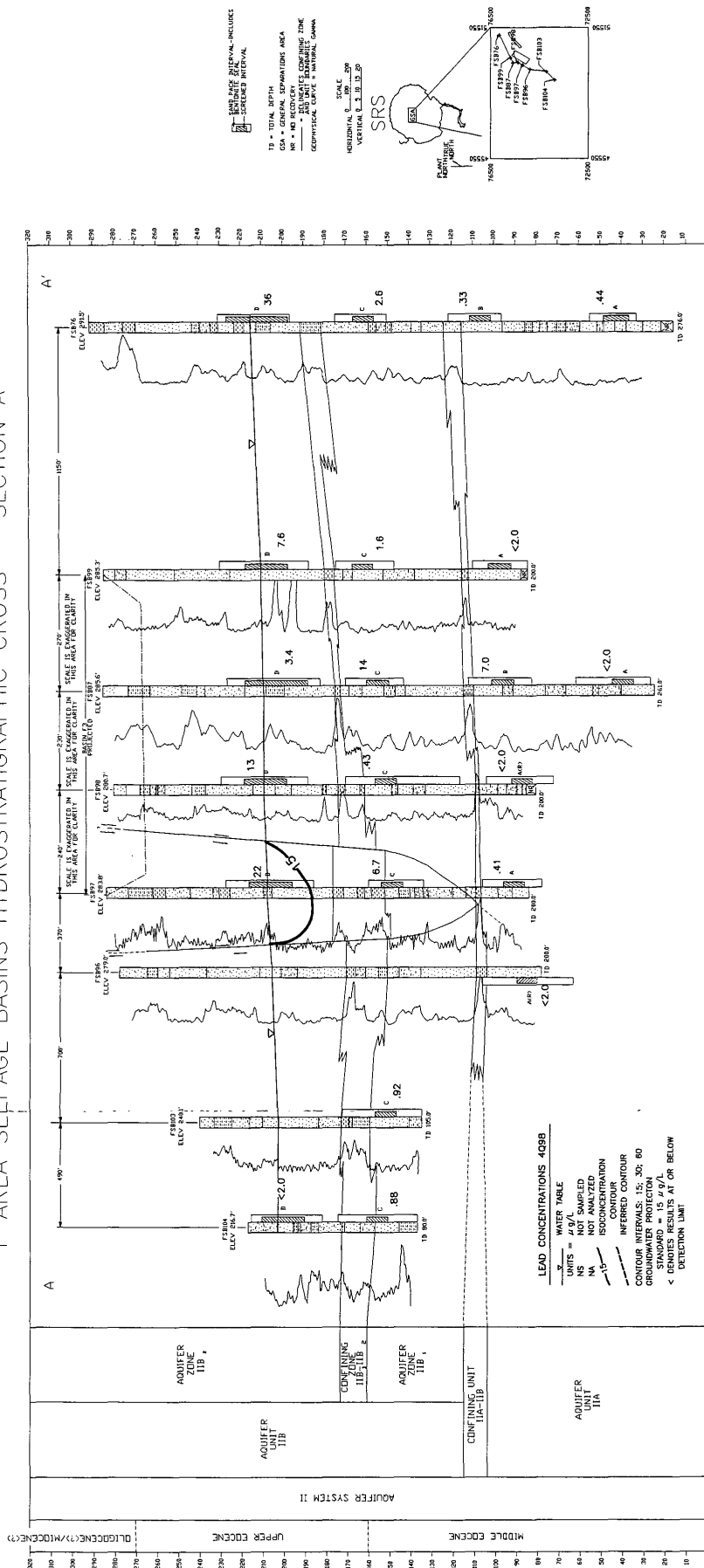


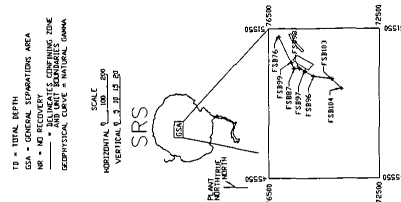


**Figure 8. Hydrogeologic Cross-Section Showing Lead Concentrations at the F-Area HWMF, Fourth Quarter 1998**

**Figure 9. Hydrogeologic Cross-Section Showing Nitrate Activities at the F-Area HWMF, Fourth Quarter 1998**

# F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS - SECTION A





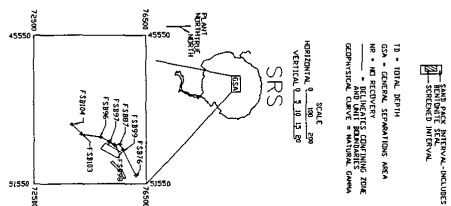


**Figure 10. Hydrogeologic Cross-Section Showing Tritium Activities at the F-Area HWMF, Fourth Quarter 1998**

**Figure 11. Hydrogeologic Cross-Section Showing Uranium-233/234 Activities at the F-Area HWMF, Third Quarter 1998**

## (2)



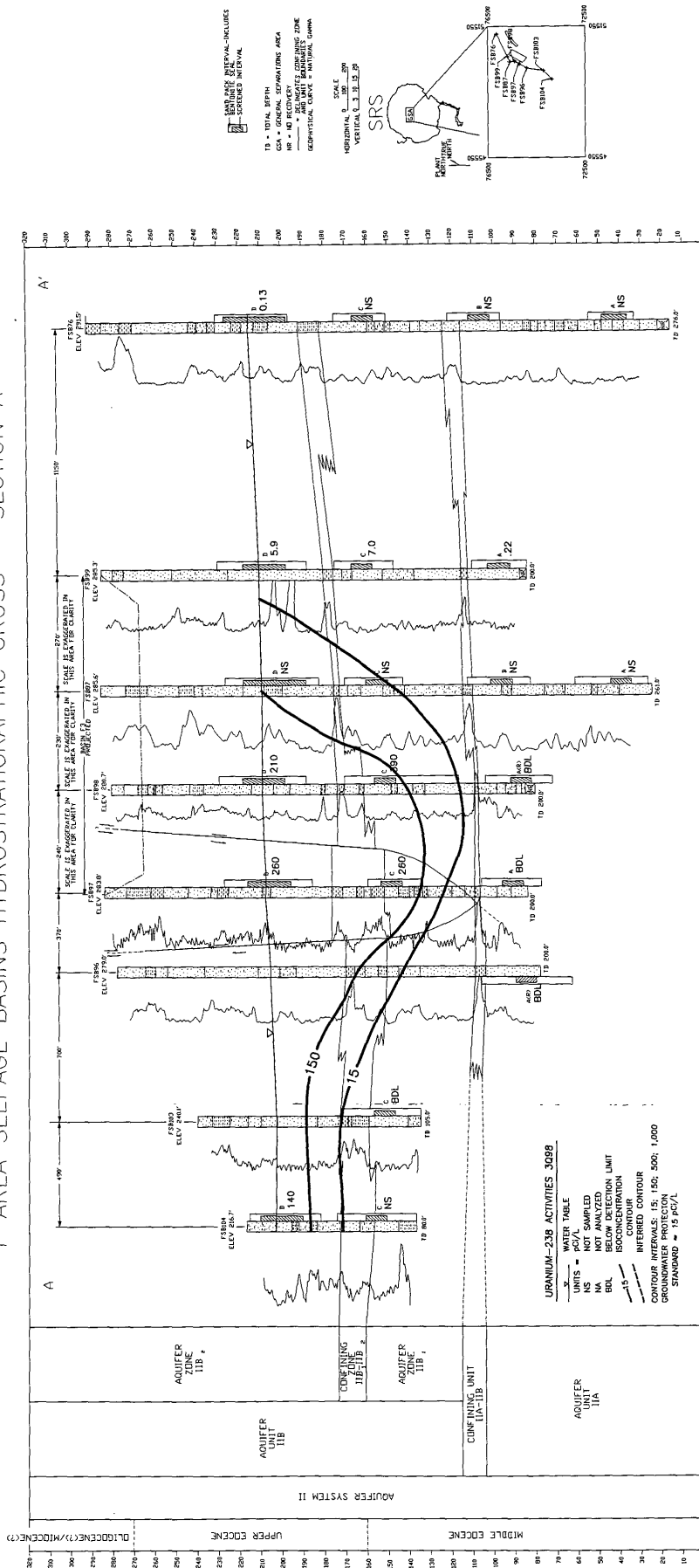


**Figure 12. Hydrogeologic Cross-Section Showing Uranium-238 Activities at the F-Area HWMF, Third Quarter 1998**

**Figure 13. Hydrogeologic Cross-Section Showing Strontium-90 Activities at the F-Area HWMF, Third Quarter 1998**



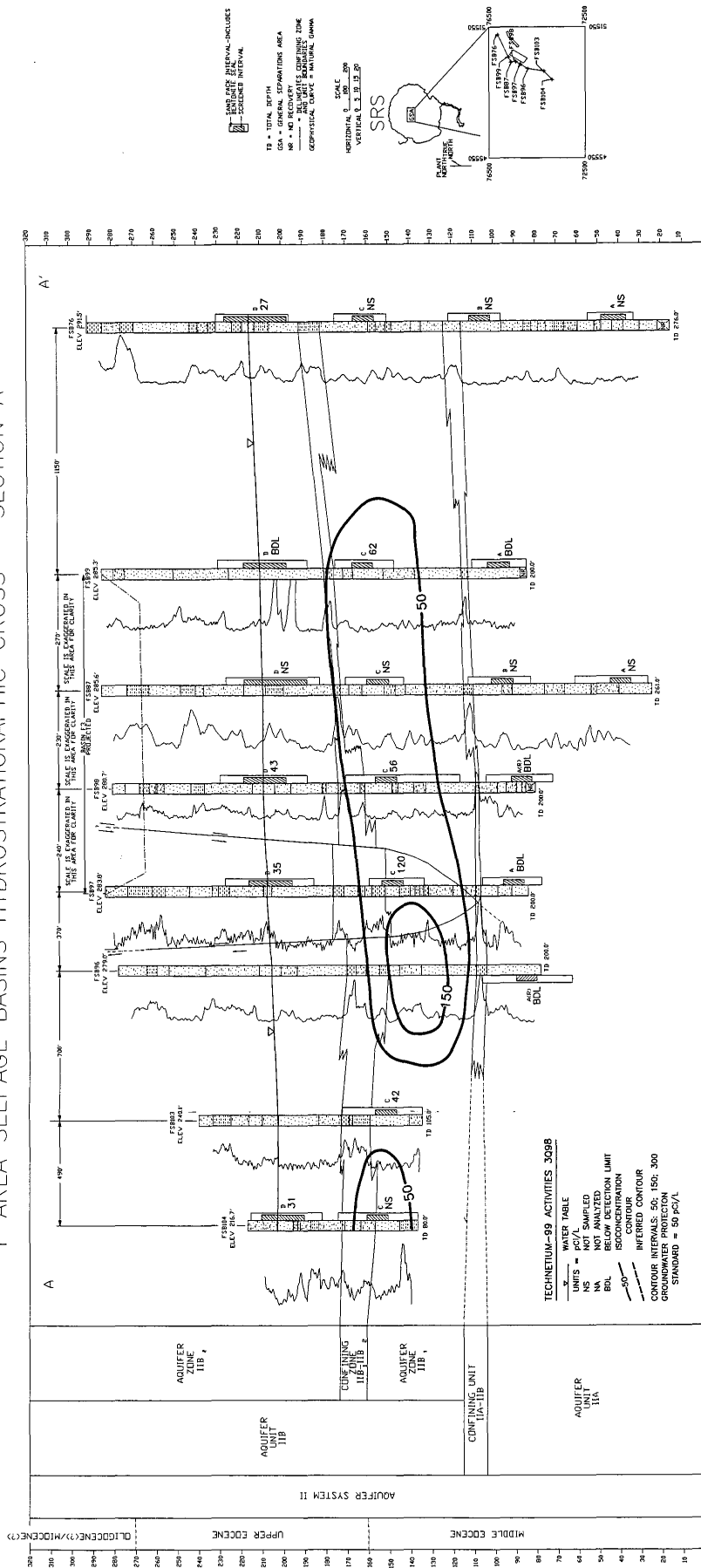
# F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS - SECTION A



**Figure 14. Hydrogeologic Cross-Section Showing Technetium-99 Activities at the F-Area HWMF, Third Quarter 1998**

**Figure 15. Hydrogeologic Cross-Section Showing Gross Alpha Activities at the F-Area HWMF, Fourth Quarter 1998**

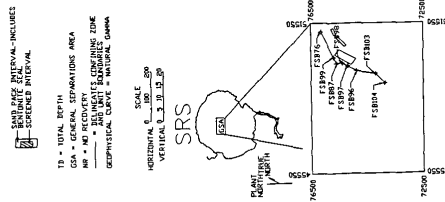
# F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS - SECTION A





**CROSS ALPHA ACTIVITIES 409B**

WELL NAME	ELEVATION (FEET)	DEPTH (FEET)	UNIT / REMARKS
F13803	ELV 264.7	10 017	AQUIFER UNIT IIB
F13802	ELV 264.1	10 305	AQUIFER UNIT IIB
F13801	ELV 263.8	10 000	AQUIFER UNIT IIB
F13800	ELV 263.7	10 000	AQUIFER UNIT IIB
F13799	ELV 263.6	10 000	AQUIFER UNIT IIB
F13798	ELV 263.5	10 000	AQUIFER UNIT IIB
F13797	ELV 263.4	10 000	AQUIFER UNIT IIB
F13796	ELV 263.3	10 000	AQUIFER UNIT IIB
F13795	ELV 263.2	10 000	AQUIFER UNIT IIB
F13794	ELV 263.1	10 000	AQUIFER UNIT IIB
F13793	ELV 263.0	10 000	AQUIFER UNIT IIB
F13792	ELV 262.9	10 000	AQUIFER UNIT IIB
F13791	ELV 262.8	10 000	AQUIFER UNIT IIB
F13790	ELV 262.7	10 000	AQUIFER UNIT IIB
F13789	ELV 262.6	10 000	AQUIFER UNIT IIB
F13788	ELV 262.5	10 000	AQUIFER UNIT IIB
F13787	ELV 262.4	10 000	AQUIFER UNIT IIB
F13786	ELV 262.3	10 000	AQUIFER UNIT IIB
F13785	ELV 262.2	10 000	AQUIFER UNIT IIB
F13784	ELV 262.1	10 000	AQUIFER UNIT IIB
F13783	ELV 262.0	10 000	AQUIFER UNIT IIB
F13782	ELV 261.9	10 000	AQUIFER UNIT IIB
F13781	ELV 261.8	10 000	AQUIFER UNIT IIB
F13780	ELV 261.7	10 000	AQUIFER UNIT IIB
F13779	ELV 261.6	10 000	AQUIFER UNIT IIB
F13778	ELV 261.5	10 000	AQUIFER UNIT IIB
F13777	ELV 261.4	10 000	AQUIFER UNIT IIB
F13776	ELV 261.3	10 000	AQUIFER UNIT IIB
F13775	ELV 261.2	10 000	AQUIFER UNIT IIB
F13774	ELV 261.1	10 000	AQUIFER UNIT IIB
F13773	ELV 261.0	10 000	AQUIFER UNIT IIB
F13772	ELV 260.9	10 000	AQUIFER UNIT IIB
F13771	ELV 260.8	10 000	AQUIFER UNIT IIB
F13770	ELV 260.7	10 000	AQUIFER UNIT IIB
F13769	ELV 260.6	10 000	AQUIFER UNIT IIB
F13768	ELV 260.5	10 000	AQUIFER UNIT IIB
F13767	ELV 260.4	10 000	AQUIFER UNIT IIB
F13766	ELV 260.3	10 000	AQUIFER UNIT IIB
F13765	ELV 260.2	10 000	AQUIFER UNIT IIB
F13764	ELV 260.1	10 000	AQUIFER UNIT IIB
F13763	ELV 260.0	10 000	AQUIFER UNIT IIB
F13762	ELV 259.9	10 000	AQUIFER UNIT IIB
F13761	ELV 259.8	10 000	AQUIFER UNIT IIB
F13760	ELV 259.7	10 000	AQUIFER UNIT IIB
F13759	ELV 259.6	10 000	AQUIFER UNIT IIB
F13758	ELV 259.5	10 000	AQUIFER UNIT IIB
F13757	ELV 259.4	10 000	AQUIFER UNIT IIB
F13756	ELV 259.3	10 000	AQUIFER UNIT IIB
F13755	ELV 259.2	10 000	AQUIFER UNIT IIB
F13754	ELV 259.1	10 000	AQUIFER UNIT IIB
F13753	ELV 259.0	10 000	AQUIFER UNIT IIB
F13752	ELV 258.9	10 000	AQUIFER UNIT IIB
F13751	ELV 258.8	10 000	AQUIFER UNIT IIB
F13750	ELV 258.7	10 000	AQUIFER UNIT IIB
F13749	ELV 258.6	10 000	AQUIFER UNIT IIB
F13748	ELV 258.5	10 000	AQUIFER UNIT IIB
F13747	ELV 258.4	10 000	AQUIFER UNIT IIB
F13746	ELV 258.3	10 000	AQUIFER UNIT IIB
F13745	ELV 258.2	10 000	AQUIFER UNIT IIB
F13744	ELV 258.1	10 000	AQUIFER UNIT IIB
F13743	ELV 258.0	10 000	AQUIFER UNIT IIB
F13742	ELV 257.9	10 000	AQUIFER UNIT IIB
F13741	ELV 257.8	10 000	AQUIFER UNIT IIB
F13740	ELV 257.7	10 000	AQUIFER UNIT IIB
F13739	ELV 257.6	10 000	AQUIFER UNIT IIB
F13738	ELV 257.5	10 000	AQUIFER UNIT IIB
F13737	ELV 257.4	10 000	AQUIFER UNIT IIB
F13736	ELV 257.3	10 000	AQUIFER UNIT IIB
F13735	ELV 257.2	10 000	AQUIFER UNIT IIB
F13734	ELV 257.1	10 000	AQUIFER UNIT IIB
F13733	ELV 257.0	10 000	AQUIFER UNIT IIB
F13732	ELV 256.9	10 000	AQUIFER UNIT IIB
F13731			



**Figure 16. Hydrogeologic Cross-Section Showing Nonvolatile Beta Activities at the F-Area HWMF, Fourth Quarter 1998**



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## Appendix C

### Analytical Results

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## Key to Reading the Tables

The following abbreviations may appear in the data tables:

### Constituents

Sp. conductance                      Specific conductance

### Laboratories

EM                      Environmental Protection Department/Environmental Monitoring Section  
                                 (EPD/EMS) Laboratory  
GE and GP              General Engineering Laboratories, Inc.  
TM                      Thermo NUtech  
WA                      Recra LabNet Philadelphia (was Roy F. Weston, Inc., until June 1997)

### Sampling Codes

A                      Pump was surging excessively; aerated  
B                      Blank sample was collected  
C                      Well was pumping continuously  
D                      Well was dry  
I                      Well went dry during sampling; insufficient water to collect all samples  
L                      Well went dry before sampling began; only depth to water can be  
                                 determined  
N                      Well was not stabilized before sampling began  
P                      Inaccessibility or mechanical failure prevented sample collection and field  
                                 analysis of the water  
S                      No water in standpipe; for water-level events only  
T                      Samples were collected, but some samples were not sent to the  
                                 laboratory due to high turbidity  
W                      Unable to sample well because of stabilization or sampling equipment  
                                 failure; water-level measurements were obtained  
X                      Well went dry during purging; samples were collected after well recovered

### Units

mg/L                      milligrams per liter  
msl                      mean sea level  
NTU                      nephelometric turbidity unit  
pCi/L                      picocuries per liter  
pCi/mL                      picocuries per milliliter  
pH                      pH units  
µg/L                      micrograms per liter  
µS/cm                      microsiemens per centimeter

### Data Table Column Headings

DF	dilution factor
H	exceeded the holding time
Mod	modifier
ST	exceeded the GWPS

### Other

CS	carbon steel
E	exponential notation (e.g., $1.1\text{E}-09 = 1.1 \times 10^{-9} = 0.0000000011$ )
PVC	polyvinyl chloride
TOC	top of casing

### Data Qualification

The contract laboratories submit sample- or batch-specific quality assurance/quality control information either at the same time as analytical results or in a quarterly summary. Properly defined and used data modifiers (also referred to as qualifiers) can be a key component in assessing data usability. These modifiers appear in the data tables under the column *Mod*. Data for third quarter 1998 were reported by the laboratories in data format AN95, while data for fourth quarter 1998 were reported in AN98. One major difference between the two formats is the modifiers used. In the data tables, three possible fields for modifiers for each quarter are separated by slashes. For AN95 data, result qualifiers (RQ) may appear before the first slash, analysis qualifiers (AQ) between the two slashes, and bias modifiers (B) after the second. For AN98 data, functional guidance qualifiers (FG) may appear before the first slash, STORET codes (SC) between the two slashes, and EMS codes (EC) after the second slash. For further information on modifiers and their definitions, contact EMS.

### AN95 Modifiers

(Blank)	Data are not qualified. Numbers should be interpreted exactly as reported.
J	Value is estimated because quantitation in the sample or in associated quality control samples did not meet specifications. (RQ)
L	Value is off-scale high. The actual value is not known but is known to be greater than the value shown. (RQ)
R	Result was rejected because performance requirements in the sample analysis or associated quality control analyses were not met. (RQ)
U	Material was analyzed for but not detected. Analytical result reported is less than the sample quantitation limit. (RQ)
E	The detected result is between the sample-specific EQL and the method detection limit. (AQ)
I	The value in the result field is the instrument reading, not the sample quantitation limit. Always used with the result qualifier <i>U</i> . (AQ)
O	Surrogate or tracer spike recovery is out of specification. (AQ)
V	Analyte was detected in an associated method blank. (AQ)
Y	Result was obtained from an unpreserved or improperly preserved sample. Data may not be accurate. (AQ)
4	Matrix interference. Value cannot be determined. Used with RQ <i>R</i> . (AQ)

#### AN98 Modifiers

(Blank)	Data are not qualified. Numbers should be interpreted exactly as reported.
J	The analyte was positively identified; the associated numerical value is an estimated concentration of the analyte in the sample. (FG)
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. (FG)
U	Material was analyzed for, but not detected. The analyte concentration is <ssEQL. (SC)
C	The result is calculated. (SC)
I	The result is less than the ssEQL, but equal to or greater than the MDL. (SC)
K	The actual concentration is known to be less than the reported result. (SC)
L	The actual concentration is known to be greater than the reported result. (SC)
Q	The sample was held beyond the normal holding time prior to analysis. (SC)
V	The analyte was detected in both the method blank and the sample. (SC)
Y	The result is from an unpreserved or incorrectly preserved sample; the data may not be accurate. (SC)
A	Compound identification criteria were not met. (EC)
C	LCS or BS criteria were not met. (EC)
D	ICP serial dilution criteria were not met. (EC)
H	Internal standard criteria were not met when the IS was used for quantitation. (EC)
I	Matrix spike recovery was not within the control limits. (EC)
K	A tentatively identified compound is a suspected aldol-condensation product. (EC)
L	Initial or continuing calibration criteria were not met. (EC)
O	Surrogate or tracer spike recovery is out of specification. (EC)
P	Graphite furnace atomic absorption QC a. Duplicate injection criteria were not met. b. Post-digestion spike recovery was not within control limits and the sample absorbance is > 50% of the post-digestion spike absorbance. (EC)
S	The sample was analyzed by the method of standard additions. (EC)
W	Graphite furnace atomic absorption QC: the post-digestion spike recovery is not within control limits and the sample absorbance is < 50% of the post-digestion spike absorbance. (EC)
X	The laboratory duplicate RPD or MS/MSD RPD was not within control limits. (EC)
4	Matrix interference is present. (EC)
5	Matrix spike concentration was < 0.25× the sample concentration, and the percent recovery cannot be determined. (EC)
6	The analyte was detected in both the sample and associated field blank. (EC)
8	The analyte was detected in both the sample and associated trip blank. (EC)
9	The field duplicate RPD was not within control limits. (EC)



## Results below Detection

For radiological analyses, the analytical result field contains the result recorded on the analytical instrument and reported by the laboratory, even if it is negative. For nonradiological analyses, if the analyte is not detected, the sample-specific estimated quantitation limit (EQL) is entered into the result field and is reported with a less than [ $<$ ] sign. The EQL is defined as the lowest concentration that can be achieved reliably within specified limits of precision and accuracy during routine laboratory operating conditions. The sample-specific EQL is modified for sample concentration or dilution or unusual aliquot size that affects analytical sensitivity.

## Data Filtering

Data in the column headed *Filt.* have been filtered to clarify their usability. In this column, *Rej.* is used to indicate rejected data.

For nondetects, this column contains the less-than symbol and the sample-specific method detection limit or sample-specific minimum detectable activity. For chemical analyses, this is the same numeric value as appears in the unfiltered result column with a few exceptions, generally data that were qualified as nondetects during validation because of contamination in an associated blank.

For data qualified with the result qualifier (third quarter 1998) or field guidance code (fourth quarter 1998) *J*, indicating an estimated quantity, the *Filt.* column contains the letters *NDD*, meaning that these data are considered not "decision" data.

## Holding Times

Standard analytical methods include a limit, called holding time, on the maximum elapsed time between sample collection and extraction or analysis by the laboratory. In the data tables, a large bullet ( $\bullet$ ) in the *H* (holding time) column indicates that holding time was exceeded. Analyses performed beyond holding times may not yield valid results.

The laboratory procedure used for the determination of specific conductance allows one day to elapse between sampling and analysis. Thus, laboratory specific conductance measurements may exceed the holding time criterion.

## Data Rounding

A constituent result in the analytical results tables that is not marked in the *ST* column but appears to equal an Appendix A standard is below the standard in the database. Values stored in the database contain more significant digits than the reported results. Apparent discrepancies in the tables are due to the rounding of reported results.

## Sampling Dates

Samples for field data are collected once each quarter, but samples for analytical data may be collected more than once each quarter. Because the results tables present the highest analytical results for each quarter, the date of collection for reported analytical results may not coincide with the date of collection for field data.

Table C-1. Groundwater Monitoring Results for Individual Wells

WELL FSB 76

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N76141.6 E51388.8	33.278022 °N 81.679386 °W	227.0-197.0 ft msl	294.2 ft msl	4" PVC	S	Water Table (IB2)

SAMPLE DATE 07/08/98 10/22/98

FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	220.4	220.5	ft msl
pH	4.6	3.9	pH
Sp. conductance	140	110	µS/cm
Water temperature	20.8	19.8	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	9.1	2.9	well vol
Sampling code			
Synchronous water level	220.7 (09/17/98)	219.8 (12/18/98)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	0.12	J/E/	NDD			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	22	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	0.87	//				1	GE								µg/L
Copper, total recoverable	350	N/				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	39	N/		■		1	GE	36	//		■		1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	<3.1	U/N/	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	14,000	N/		■		25	GE	9,800	//6				5	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	130	N/				1	GE								µg/L

Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	<10			1	GE								µg/L
Dichloromethane	<2.6	UJ/OV/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76 (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<1.7E-02	U//	< 0.1660			1	GP								pCi/L
Beta dose	0.6365														pCi/L
Cesium-137	5.3E+00	//				1	GP								pCi/L
Cobalt-60	<6.9E-01	U//	< 4.2000			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.0994			1	GP								pCi/L
Curium-243/244	<1.6E-02	U//	< 0.1960			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0943			1	GP								pCi/L
Gross alpha	1.8E+01	//		■		1	GP	1.2E+01	//			1	GE		pCi/L
Iodine-129	<9.2E-01	U//	< 1.4200			1	GP								pCi/L
Nonvolatile beta	2.0E+01	//				1	GP	9.8E+00	//			1	GE		pCi/L
Plutonium-238	<4.6E-03	U//	< 0.1140			1	GP								pCi/L
Plutonium-239/240	<1.2E-02	U//	< 0.1140			1	GP								pCi/L
Radium-226	7.4E+00	//		■		1	GP								pCi/L
Radium-228	2.9E+00	//				1	GP								pCi/L
Strontium-90	<5.0E-01	U//	< 1.4300			1	GP								pCi/L
Technetium-99	2.7E+01	//				1	GP								pCi/L
Thorium-228	<4.8E-01	U//	< 0.7360			1	GP								pCi/L
Thorium-230	<3.7E-02	U//	< 0.3530			1	GP								pCi/L
Thorium-232	<0.0E+00	U//	< 0.1530			1	GP								pCi/L
Sum of alphas	1.3E-01														pCi/L
Sum of betas	3.5E+01														pCi/L
Total radium	1.0E+01			■											pCi/L
Tritium	2.9E+02	//		■		1	GP	3.3E+02	//			■	1	GE	pCi/mL
Uranium-233/234	<1.8E-01	U//	< 0.0540			1	GP								pCi/L
Uranium-235	<1.8E-02	U//	< 0.0542			1	GP								pCi/L
Uranium-238	1.3E-01	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 76A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N76131.9 E51391.6	33.278005 °N 81.679359 °W	47.4-36.9 ft msl	293.9 ft msl	4" PVC	S	L. Congaree (IIA)

SAMPLE DATE 07/08/98 10/22/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation		155.9	ft msl
pH	6.6	6.0	pH
Sp. conductance	100	100	µS/cm
Water temperature	21.0	19.9	°C
Alkalinity as CaCO <sub>3</sub>	35	38	mg/L
Turbidity	1	1	NTU
Volumes purged		1.9	well vol
Sampling code	S		
Synchronous water level	155.5 (09/17/98)	155.7 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.4	J/EV//	NDD			1	GE	0.44	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	<40	U/V//	< 50			1	GE	17	J//	NDD			1	WA	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76A (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.1E+00	//				1	GP	1.7E+00	J//	NDD			1	TM	pCi/L
Iodine-129															
Nonvolatile beta	<7.9E-01	U//	< 1.2200			1	GP	1.6E+00	J//	NDD			1	TM	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	<-2.2E-01	U//	<6.6E-01			1	GP	<-9.2E-02	U//	<<6.5E-01			1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 76B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N76122.4 E51394.0	33.277988 °N 81.679335 °W	109.7-99.2 ft msl	293.8 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/08/98	10/22/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	152.2	152.2	ft msl
pH	6.9	6.2	pH
Sp. conductance	120	110	µS/cm
Water temperature	21.1	20.8	°C
Alkalinity as CaCO <sub>3</sub>	43	37	mg/L
Turbidity	1	1	NTU
Volumes purged	3.9	2.2	well vol
Sampling code			
Synchronous water level	151.8 (09/17/98)	151.9 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<0.27	U//	< 2.0			1	GE	0.33	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	510	//				1	GE	530	//6				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 76B (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	7.7E-01	//				1	GP	<3.2E-01	U//	<			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<5.3E-01	U//	< 1.0900			1	GP	<8.6E-01	U//	<			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	<2.9E-01	U//	<6.6E-01			1	GP	<1.3E-01	U//	<6.4E-01			1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 76C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N76112.4 E51396.4	33.277970 °N 81.679309 °W	165.3-154.8 ft msl	293.6 ft msl	4" PVC	S	Barnwell (IB1)

SAMPLE DATE 07/08/98 10/22/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	214.8	178.4	ft msl
pH	5.9	5.9	pH
Sp. conductance	44	50	µS/cm
Water temperature	21.1	20.3	°C
Alkalinity as CaCO <sub>3</sub>	9	13	mg/L
Turbidity	0	1	NTU
Volumes purged	4.6	3.2	well vol
Sampling code			
Synchronous water level	214.6 (09/17/98)	214.5 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.52	J/EV//	NDD			1	GE	2.6	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,300	N//				1	GE	1,100	//6				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 76C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<4.3E-01	UI//	< 0.6480			1	GP	<2.0E-01	U//	<			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<5.7E-01	UI//	< 1.1800			1	GP	<6.4E-01	U//	<			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	2.3E+00	//				1	GP	2.3E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 77

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75129.4 E50713.1	33.274681 °N 81.679198 °W	216.4-186.4 ft msl	273.3 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/07/98 10/08/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	215.7	215.2	ft msl
pH	3.4	3.5	pH
Sp. conductance	1100	770	µS/cm
Water temperature	22.7	20.4	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	7	NTU
Volumes purged	2.9	3.4	well vol
Sampling code			
Synchronous water level	215.3 (09/17/98)	214.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	14	J/E/	NDD			20	GE	9.1	//		■		1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	11	J/E/	NDD			20	GE	1.7	J/IV/	NDD	■		1	GE	µg/L
Mercury, total recoverable								7.1	//		■		1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	110,000	N/		■		50	GE	88,000	//		■		50	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 77 (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.0E+03	J/I/1	NDD			1	GP	6.3E+02	J/L/I	NDD			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	1.8E+03	J/IV/1	NDD			1	GP	1.3E+03	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	4.3E+03	//		■		1	GP	2.7E+03	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 78

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74764.0 E50164.7	33.272978 °N 81.679932 °W	217.7-187.7 ft msl	272.6 ft msl	4" PVC	V	Water Table (IB2)

SAMPLE DATE 07/06/98 10/08/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	211.6	209.8	ft msl
pH	3.1	3.3	pH
Sp. conductance	980	990	µS/cm
Water temperature	21.2	20.6	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	3	2	NTU
Volumes purged	2.5	3.4	well vol
Sampling code			
Synchronous water level	209.6 (09/17/98)	209.5 (12/16/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	13	//		■		1	GE	18	//		■		1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	4.4	//				1	GE	<0.62	UN/	<0.62			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	110,000	N/		■		50	GE	94,000	//		■		50	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 78 (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	8.5E+02	J/I/1	NDD			1	GP	9.3E+02	J/L/I	NDD			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	1.8E+03	J/IV/1	NDD			1	GP	2.4E+03	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	4.5E+03	//		■		1	GP	2.4E+03	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 78A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74757.7 E50172.8	33.272977 °N 81.679898 °W	37.5-27.0 ft msl	272.6 ft msl	4" PVC	S	L. Congaree (IIA)

SAMPLE DATE 07/09/98 10/23/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	156.9	156.6	ft msl
pH	6.0	7.0	pH
Sp. conductance	110	100	µS/cm
Water temperature	21.4	20.1	°C
Alkalinity as CaCO <sub>3</sub>	39	33	mg/L
Turbidity	3	1	NTU
Volumes purged	2.4	2.1	well vol
Sampling code			
Synchronous water level	156.5 (09/17/98)	156.5 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.49	J/E/	NDD			1	GE	0.46	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	270	N/				1	GE	330	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Notes:  
 ● = exceeded holding time  
 ■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 78A (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.3E+00	//				1	GP	<1.1E+00	U//					1	GE pCi/L
Iodine-129															
Nonvolatile beta	1.5E+00	//				1	GP	<1.3E+00	U//					1	GE pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	5.4E+00	//				1	GP	5.4E+00	//					1	GE pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 78B

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74765.9 E50178.8	33.273005 °N 81.679898 °W	92.8-82.4 ft msl	272.8 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/09/98 10/23/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	155.2	155.0	ft msl
pH	7.5	6.4	pH
Sp. conductance	210	220	µS/cm
Water temperature	22.5	19.6	°C
Alkalinity as CaCO <sub>3</sub>	52	66	mg/L
Turbidity	1	1	NTU
Volumes purged	2.4	2.4	well vol
Sampling code			
Synchronous water level	154.6 (09/17/98)	154.9 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<2.0	U//	< 2.0			10	GE								µg/L
Arsenic, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Barium, total recoverable	36	//				10	GE								µg/L
Cadmium, total recoverable	<10	U//	< 10			10	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Cobalt, total recoverable	<2.0	U//	< 2.0			10	GE								µg/L
Copper, total recoverable	2.5	//				10	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	<20	U//	< 20			10	GE	0.60	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	<2.0	U//	< 2.0			10	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	7,400	N//				5	GE	9,100	//				5	GE	µg/L
Selenium, total recoverable	7.7	J/E/	NDD			10	GE								µg/L
Silver, total recoverable	<10	U//	< 10			10	GE								µg/L
Thallium, total recoverable	0.65	J/E/	NDD			10	GE								µg/L
Vanadium, total recoverable	<20	U//	< 20			10	GE								µg/L
Zinc, total recoverable	<50	U//	< 50			10	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.0	U//	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

Notes:  
 ● = exceeded holding time  
 ■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 78B (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<1.9E-02	U//	< 0.1210			1	GP								pCi/L
Cesium-137	<1.9E+00	U//	< 3.8500			1	GP								pCi/L
Cobalt-60	<1.8E-01	U//	< 2.7800			1	GP								pCi/L
Curium-242	<9.9E-03	U//	< 0.1290			1	GP								pCi/L
Curium-243/244	<4.9E-02	U//	< 0.1210			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0582			1	GP								pCi/L
Gross alpha	1.4E+00	//				1	GP	<1.5E+00	U//	<9.9E-01			1	GE	pCi/L
Iodine-129	<3.7E-01	U//	< 0.5390			1	GP								pCi/L
Nonvolatile beta	3.4E+00	//				1	GP	<1.4E+00	U//	<1.3E+00			1	GE	pCi/L
Plutonium-238	<4.2E-03	U//	< 0.0912			1	GP								pCi/L
Plutonium-239/240	<1.2E-02	U//	< 0.1200			1	GP								pCi/L
Radium-226	<4.8E-01	U//	< 0.5600			1	GP								pCi/L
Radium-228	<4.3E-01	U//	< 1.2900			1	GP								pCi/L
Strontium-90	<2.9E-01	U//				1	GP								pCi/L
Technetium-99	<0.0E+00	U//	< 24.3000			1	GP								pCi/L
Thorium-228	<2.2E-01	U//	< 0.2550			1	GP								pCi/L
Thorium-230	<3.2E-02	U//	< 0.0946			1	GP								pCi/L
Thorium-232	<1.2E-02	U//	< 0.1840			1	GP								pCi/L
Sum of alphas															
Sum of betas															
Tritium	1.8E+02	//		■		1	GP	2.2E+02	//		■		1	GE	pCi/mL
Uranium-233/234	<3.7E-01	U//	< 0.1050			1	GP								pCi/L
Uranium-235	<9.5E-02	U//	< 0.1050			1	GP								pCi/L
Uranium-238	<7.5E-02	U//	< 0.1050			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 78C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74772.5 E50170.2	33.273006 °N 81.679934 °W	151.4-141.6 ft msl	273.5 ft msl	4" PVC	V	Barnwell (11B <sub>1</sub> )

SAMPLE DATE 07/07/98 10/12/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	210.5	209.7	ft msl
pH	3.8	3.9	pH
Sp. conductance	2000	2000	µS/cm
Water temperature	22.3	22.9	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged		0.0	well vol
Sampling code	XN	XN	
Synchronous water level	208.9 (09/17/98)	208.2 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<150	U//	<150			50	GE								µg/L
Barium, total recoverable	650	N//				1	GE								µg/L
Cadmium, total recoverable	16	//		■		1	GE	17	//		■		1	GE	µg/L
Chromium, total recoverable	<3.1	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	250	//		■		1	GE								µg/L
Copper, total recoverable	290	N//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	210	N//		■		1	GE	24	//		■		1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	<120	U//	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	270,000	//		■		100	GE	290,000	//		■		150	GE	µg/L
Selenium, total recoverable	<250	U//	<250			50	GE								µg/L
Silver, total recoverable	<0.28	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.79	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	620	N//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 13			1	GE								µg/L
Dichloromethane	<3.8	U//V8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 78C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	3.5E-01	R/O/	Rej	■		1	GP								pCi/L
Beta dose	165.3000			■											pCi/L
Cesium-137	<1.7E+00	U//	< 4.1700			1	GP								pCi/L
Cobalt-60	<4.0E-01	U//	< 4.6800			1	GP								pCi/L
Curium-242	-1.1E-01	R/O/	Rej			1	GP								pCi/L
Curium-243/244	3.7E-01	R/O/	Rej			1	GP								pCi/L
Curium-245/246	0.0E+00	R/O/	Rej			1	GP								pCi/L
Gross alpha	1.6E+02	J//1	NDD			1	GP	2.8E+02	J//1	NDD			1	GE	pCi/L
Iodine-129	1.1E+02	//		■		1	GP								pCi/L
Nonvolatile beta	9.7E+02	J//V/1	NDD			1	GP	1.2E+03	//		■		1	GE	pCi/L
Plutonium-238	1.4E+00	R//	Rej			1	GP								pCi/L
Plutonium-239/240	<1.5E-01	U//C/				1	GP								pCi/L
Radium-226	4.3E+01	//		■		1	GP								pCi/L
Radium-228	<3.3E-01	U//	< 1.4000			1	GP								pCi/L
Strontium-90	4.4E+02	//		■		1	GP								pCi/L
Technetium-99	2.7E+02	//		■		1	GP								pCi/L
Thorium-228	<4.5E-01	U//	< 0.7230			1	GP								pCi/L
Thorium-230	<6.4E-02	U//	< 0.2640			1	GP								pCi/L
Thorium-232	<4.2E-02	U//	< 0.1270			1	GP								pCi/L
Sum of alphas	1.1E+02			■											pCi/L
Sum of betas	8.2E+02			■											pCi/L
Total radium	4.3E+01			■											pCi/L
Tritium	7.8E+03	//		■		1	GP	9.7E+03	//		■		1	GE	pCi/mL
Uranium-233/234	4.8E+01	//		■		1	GP								pCi/L
Uranium-235	3.5E+00	//		■		1	GP								pCi/L
Uranium-238	5.5E+01	//		■		1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 79

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N73663.1 E50139.7	33.270502 °N 81.677859 °W	204.1-174.1 ft msl	217.8 ft msl	4" PVC	V	Water Table (IB2)

SAMPLE DATE	07/10/98	10/05/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	190.6	202.4	ft msl
pH	3.6	3.6	pH
Sp. conductance	2020	700	µS/cm
Water temperature	22.4	21.9	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.4	3.6	well vol
Sampling code			
Synchronous water level	201.8 (09/17/98)	190.6 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.77	U//	< 2.0			10	GE								µg/L
Arsenic, total recoverable	<300	U//	<300.0000			100	GE								µg/L
Barium, total recoverable	750	//				10	GE								µg/L
Cadmium, total recoverable	5.4	J/E/	NDD			10	GE	4.6	//				1	GE	µg/L
Chromium, total recoverable	29	J/EV/	NDD			10	GE								µg/L
Cobalt, total recoverable	580	//		■		10	GE								µg/L
Copper, total recoverable	90	//				10	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	19	J/E/	NDD			10	GE	0.57	J//	NDD			1	GE	µg/L
Mercury, total recoverable	3.7	//		■		1	GE								µg/L
Nickel, total recoverable	74	//				10	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	320,000	//		■		200	GE	80,000	//				50	GE	µg/L
Selenium, total recoverable	<500	U//	<500.0000			100	GE								µg/L
Silver, total recoverable	1.7	J/CEV/	NDD			10	GE								µg/L
Thallium, total recoverable	5.9	J/E/	NDD			10	GE								µg/L
Vanadium, total recoverable	<20	U//	< 20			10	GE								µg/L
Zinc, total recoverable	160	//				10	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	UJ/O/1	< 1.0		1		GE								µg/L
Bis(2-ethylhexyl) phthalate	<11	U//	< 11			1	GE								µg/L
Dichloromethane	<2.3	UJ/VO8/1	< 1.0		1		GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	0.81	J/EO/1	NDD			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 79 (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	4.7E+01	//		■		1	GP								pCi/L
Beta dose	166.3611			■											pCi/L
Cesium-137	<7.9E-01	U//	< 4.1600			1	GP								pCi/L
Cobalt-60	<3.5E+00	U//	< 5.6400			1	GP								pCi/L
Curium-242	<1.7E-01	U//	< 0.5100			1	GP								pCi/L
Curium-243/244	9.2E+01	//		■		1	GP								pCi/L
Curium-245/246	<5.2E-01	U//	< 0.9370			1	GP								pCi/L
Gross alpha	1.5E+03	//		■		1	GP	4.0E+02	//		■		1	GE	pCi/L
Iodine-129	1.3E+02	//		■		1	GP								pCi/L
Nonvolatile beta	1.6E+03	J/C/	NDD			1	GP	6.5E+02	//		■		1	GE	pCi/L
Plutonium-238	<1.5E-02	U//	< 0.1030			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	U//	< 0.0587			1	GP								pCi/L
Radium-226	2.5E+01	//		■		1	GP								pCi/L
Radium-228	<4.7E-01	U//	< 1.2100			1	GP								pCi/L
Strontium-90	2.9E+02	//		■		1	GP								pCi/L
Technetium-99	1.0E+02	//		■		1	GP								pCi/L
Thorium-228	1.4E+00	//				1	GP								pCi/L
Thorium-230	4.9E-01	J/C/	NDD			1	GP								pCi/L
Thorium-232	<7.2E-02	U//	< 0.2150			1	GP								pCi/L
Sum of alphas	7.4E+02			■											pCi/L
Sum of betas	5.2E+02			■											pCi/L
Total radium	2.5E+01			■											pCi/L
Tritium	1.5E+04	//		■		1	GP	9.7E+03	//		■		1	GE	pCi/mL
Uranium-233/234	2.0E+02	//		■		1	GP								pCi/L
Uranium-235	2.1E+01	//		■		1	GP								pCi/L
Uranium-238	3.8E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 79A

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N73664.5 E50149.6	33.270522 °N 81.677836 °W	34.4-24.0 ft msl	218.1 ft msl	4" PVC	S	L. Congaree (IIA)

SAMPLE DATE 07/01/98 10/14/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	159.1	158.2	ft msl
pH	6.2	6.1	pH
Sp. conductance	82	72	µS/cm
Water temperature	20.8	21.5	°C
Alkalinity as CaCO <sub>3</sub>	36	24	mg/L
Turbidity	1	1	NTU
Volumes purged	2.7	2.2	well vol
Sampling code			
Synchronous water level	158.4 (09/17/98)	158.6 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	0.029	J/IV/	NDD			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.22	J/E/	NDD			1	GE	<0.16	U/V/	<2.0			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,400	//				1	GE	290	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 79A (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<3.5E-01	U//	< 1.1600			1	GP	<9.2E-01	U//	<6.1E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	1.8E+00	//				1	GP	<2.0E+00	U//	<1.2E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	3.4E+01	//		■		1	GP	7.6E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 79B

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N73666.1 E50159.2	33.270541 °N 81.677813 °W	91.2-80.7 ft msl	218.2 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/08/98	10/27/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	159.1	158.9	ft msl
pH	6.6	6.4	pH
Sp. conductance	150	160	µS/cm
Water temperature	22.0	20.5	°C
Alkalinity as CaCO <sub>3</sub>	64	37	mg/L
Turbidity	1	0	NTU
Volumes purged	2.4	2.6	well vol
Sampling code			
Synchronous water level	158.6 (09/17/98)	158.8 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<0.28	U//	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	2,900	N//				1	GE	2,800	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Notes:  
 ● = exceeded holding time  
 ■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 79B (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.2E+00	//				1	GP	<4.5E-01	U//	<9.9E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	2.2E+00	//				1	GP	<1.5E+00	U//	<1.3E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	3.8E+01	//		■		1	GP	9.8E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 79C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N73668.0 E50171.3	33.270565 °N 81.677785 °W	159.6-149.8 ft msl	218.4 ft msl	4" PVC	V	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/10/98 10/05/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	197.3	196.7	ft msl
pH	3.8	3.7	pH
Sp. conductance	1020	1200	µS/cm
Water temperature	20.2	21.3	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	2.1	3.2	well vol
Sampling code			
Synchronous water level	196.8 (09/17/98)	196.7 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<4.0	U//	< 4.0000			20	GE								µg/L
Arsenic, total recoverable	<300	U//	<300.0000			100	GE								µg/L
Barium, total recoverable	530	//				20	GE								µg/L
Cadmium, total recoverable	15	J/E/	NDD			20	GE	14	//		■		1	GE	µg/L
Chromium, total recoverable	39	J/EV/	NDD			20	GE								µg/L
Cobalt, total recoverable	120	//		■		20	GE								µg/L
Copper, total recoverable	55	//				20	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	6.4	J/E/	NDD			20	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	1.9	//				1	GE								µg/L
Nickel, total recoverable	40	//				20	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	170,000	//		■		150	GE	170,000	//		■		100	GE	µg/L
Selenium, total recoverable	<500	U//	<500.0000			100	GE								µg/L
Silver, total recoverable	1.4	J/CEV/	NDD			20	GE								µg/L
Thallium, total recoverable	3.4	J/E/	NDD			20	GE								µg/L
Vanadium, total recoverable	<40	U//	< 40.0000			20	GE								µg/L
Zinc, total recoverable	130	//				20	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	<10			1	GE								µg/L
Dichloromethane	<2.6	UJ/VQ8/1	< 1.0			1	GE								µg/L
Phenols	3.6	J/E/	NDD			1	GE								µg/L
Tetrachloroethylene	0.76	J/EO/1	NDD			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 79C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	2.6E+01	//		■		1	GP								pCi/L
Beta dose	191.8367			■											pCi/L
Cesium-137	<7.5E-01	U//	< 3.9000			1	GP								pCi/L
Cobalt-60	<2.3E+00	U//	< 4.5800			1	GP								pCi/L
Curium-242	<3.4E-01	U//	< 0.5030			1	GP								pCi/L
Curium-243/244	3.0E+01	//		■		1	GP								pCi/L
Curium-245/246	<2.9E-01	U//	< 0.4400			1	GP								pCi/L
Gross alpha	6.1E+02	//		■		1	GP	5.8E+02	//		■		1	GE	pCi/L
Iodine-129	1.1E+02	//		■		1	GP								pCi/L
Nonvolatile beta	1.5E+03	//		■		1	GP	1.6E+03	//		■		1	GE	pCi/L
Plutonium-238	<0.0E+00	U//	< 0.0494			1	GP								pCi/L
Plutonium-239/240	<1.6E-02	U//	< 0.0493			1	GP								pCi/L
Radium-226	6.3E+01	//		■		1	GP								pCi/L
Radium-228	2.1E+00	//				1	GP								pCi/L
Strontium-90	6.5E+02	//		■		1	GP								pCi/L
Technetium-99	1.5E+02	//		■		1	GP								pCi/L
Thorium-228	<1.1E+00	U//	< 1.2800			1	GP								pCi/L
Thorium-230	<6.1E-01	U//C/				1	GP								pCi/L
Thorium-232	<1.0E-01	U//	< 0.7030			1	GP								pCi/L
Sum of alphas	4.6E+02			■											pCi/L
Sum of betas	9.2E+02			■											pCi/L
Total radium	6.5E+01			■											pCi/L
Tritium	7.6E+03	//		■		1	GP	7.8E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.9E+02	//		■		1	GP								pCi/L
Uranium-235	1.6E+01	//		■		1	GP								pCi/L
Uranium-238	2.0E+02	//		■		1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 87A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75601.7 E50115.8	33.274751 °N 81.681688 °W	43.6-33.1 ft msl	287.8 ft msl	4" PVC	S	L. Congaree (IIA)

SAMPLE DATE 07/08/98 10/27/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	154.7	154.4	ft msl
pH	6.4	6.4	pH
Sp. conductance	110	80	µS/cm
Water temperature	23.1	20.8	°C
Alkalinity as CaCO <sub>3</sub>	43	34	mg/L
Turbidity	0	0	NTU
Volumes purged	2.3	2.2	well vol
Sampling code			
Synchronous water level	154.7 (09/18/98)	154.3 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<0.17	U//	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	70	N//				1	GE	<110	U//6	<<50			1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 87A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	8.6E-01	//				1	GP	<8.0E-01	U//					1	GE pCi/L
Iodine-129															
Nonvolatile beta	1.6E+00	//				1	GP	<1.0E+00	U//					1	GE pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	9.3E-01	//				1	GP	1.7E+00	//					1	GE pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 87B

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75597.0 E50104.9	33.274722 °N 81.681708 °W	100.5-90.0 ft msl	287.5 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/08/98	10/27/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	151.3	151.2	ft msl
pH	5.6	5.8	pH
Sp. conductance	110	95	µS/cm
Water temperature	22.4	20.6	°C
Alkalinity as CaCO <sub>3</sub>	67	2	mg/L
Turbidity	1	1	NTU
Volumes purged	2.6	2.7	well vol
Sampling code			
Synchronous water level	151.4 (09/18/98)	151.1 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.8	J/EV/	NDD			1	GE	7.0	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	8,700	/V/				5	GE	9,300	//6				5	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 87B (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<2.6E-01	U//	< 0.5800			1	GP	<1.5E-01	U//	<6.7E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	5.1E+00	//				1	GP	4.1E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.3E+02	//		■		1	GP	1.8E+02	//		■		1	TM	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 87C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75591.9 E50093.4	33.274692 °N 81.681728 °W	159.3-148.8 ft msl	287.5 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE	07/08/98	10/27/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	211.5	211.3	ft msl
pH	5.5	5.7	pH
Sp. conductance	97	85	µS/cm
Water temperature	22.4	23.5	°C
Alkalinity as CaCO <sub>3</sub>	6	5	mg/L
Turbidity	0	1	NTU
Volumes purged	2.8	2.7	well vol
Sampling code			
Synchronous water level	211.9 (09/18/98)	210.4 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	9.3	N//				1	GE	14	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	7,800	N//				5	GE	7,400	//6				10	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 87C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.2E+00	//				1	GP	<8.0E-01	U//	<4.5E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	2.8E+00	//				1	GP	3.9E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	4.4E+02	//		■		1	GP	6.1E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 87D

<u>SRS Coord</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75586.3 E50081.1	33.274660 °N 81.681749 °W	216.8-187.4 ft msl	287.3 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/08/98	12/7/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	215.5	213.9	ft msl
pH	3.9	3.6	pH
Sp. conductance	65	61	µS/cm
Water temperature	21.8	20.4	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	2	1.2	NTU
Volumes purged	2.8		well vol
Sampling code			
Synchronous water level	215.3 (09/18/98)	214.2 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	2.2	//				1	GE	1.0	J//	NDD			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	5.4	//				1	GE	3.4	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	3,000	//				3	GE	3,000	//				3	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

WELL FSB 87D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	8.2E+01	//		■		1	GP	4.6E+01	//		■		1	GP	pCi/L
Iodine-129															
Nonvolatile beta	5.8E+01	//		■		1	GP	3.8E+01	//				1	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.2E+01	//				1	GP	1.2E+01	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

# WELL FSB 88C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75619.4 E51518.0	33.277078 °N 81.678031 °W	168.4-158.4 ft msl	283 ft msl	4" PVC	S	Barnwell (IB1)

SAMPLE DATE 07/20/98 10/27/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	214.8	215.0	ft msl
pH	5.4	5.1	pH
Sp. conductance	46	42	µS/cm
Water temperature	21.2	19.4	°C
Alkalinity as CaCO <sub>3</sub>	6	8	mg/L
Turbidity	0	1	NTU
Volumes purged	2.2	5.3	well vol
Sampling code			
Synchronous water level	214.9 (09/17/98)	214.3 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	12	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	0.71	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	0.093	J/E/	NDD			1	GE								µg/L
Copper, total recoverable	2.4	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	0.29	J/E/	NDD			1	GE	0.35	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	1.5	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	4,800	//				3	GE	1,700	//				1	GE	µg/L
Selenium, total recoverable	<0.89	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	0.15	J/E/	NDD			1	GE								µg/L
Thallium, total recoverable	0.22	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	14	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<2.0	U//VO8/1	< 1.0			1	GE								µg/L
Phenols	4.2	J/E/	NDD			1	GE								µg/L
Tetrachloroethylene	<1.8	U//O/1	< 1.0			1	GE								µg/L
Trichloroethylene	0.59	J/E/O/1	NDD			1	GE								µg/L
Trichlorofluoromethane	<1.8	U//O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 88C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<6.2E-02	U//	< 0.1660			1	GP								pCi/L
Cesium-137	7.4E+00	R/J/	Rej			1	GP								pCi/L
Cobalt-60	<-9.8E-02	U//	< 3.4700			1	GP								pCi/L
Curium-242	<-2.7E-02	U//	< 0.1790			1	GP								pCi/L
Curium-243/244	<2.0E-02	U//	< 0.1460			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0579			1	GP								pCi/L
Gross alpha	<6.0E-01	U//	< 0.6320			1	GP	<2.1E+00	U//	<2.1E+00			1	GE	pCi/L
Iodine-129	<1.0E+00	U//	< 1.3600			1	GP								pCi/L
Nonvolatile beta	<9.5E-01	U//	< 1.0100			1	GP	<2.2E+00	U//	<2.2E+00			1	GE	pCi/L
Plutonium-238	<0.0E+00	U//	< 0.0629			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	U//	< 0.0628			1	GP								pCi/L
Radium-226	<3.1E-01	U//	< 0.5750			1	GP								pCi/L
Radium-228	<5.8E-01	U//	< 1.1500			1	GP								pCi/L
Strontium-90	<5.1E-01	U//	< 1.0			1	GP								pCi/L
Technetium-99	<6.0E+00	U//	< 23.5000			1	GP								pCi/L
Thorium-228	<1.2E-01	U//	< 0.0702			1	GP								pCi/L
Thorium-230	<4.0E-02	U//	< 0.1210			1	GP								pCi/L
Thorium-232	<-5.5E-03	U//	< 0.1210			1	GP								pCi/L
Sum of alphas	1.4E+00														pCi/L
Sum of betas															pCi/L
Tritium	6.9E+01	//		■		1	GP	1.5E+01	//				1	GE	pCi/mL
Uranium-233/234	2.2E-01	//				1	GP								pCi/L
Uranium-235	<7.2E-02	U//	< 0.1370			1	GP								pCi/L
Uranium-238	1.1E+00	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 88D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75621.8 E51527.0	33.277098 °N 81.678012 °W	222.1-202.1 ft msl	282.4 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/07/98 10/07/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	219.1	219.1	ft msl
pH	3.8	3.9	pH
Sp. conductance	220	210	µS/cm
Water temperature	20.8	21.0	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	2	2	NTU
Volumes purged	0.18	2.4	well vol
Sampling code	XN		
Synchronous water level	219.2 (09/17/98)	218.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	0.60	J/E/	NDD			1	GE								µg/L
Barium, total recoverable	73	//				1	GE								µg/L
Cadmium, total recoverable	0.79	J/E/	NDD			1	GE	0.90	J//	NDD			1	GE	µg/L
Chromium, total recoverable	3.1	//				1	GE								µg/L
Cobalt, total recoverable	6.5	//		■		1	GE								µg/L
Copper, total recoverable	12	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	6.2	N//				1	GE	3.3	//				1	GE	µg/L
Mercury, total recoverable	4.7	//		■		1	GE								µg/L
Nickel, total recoverable	10	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	23,000	N//		■		25	GE	29,000	//				10	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.21	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	53	//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.1	U/V8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 88D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	7.0E+00	//		■		1	GP								pCi/L
Beta dose	73.9789			■											pCi/L
Cesium-137	<7.0E-01	UI//	< 4.4700			1	GP								pCi/L
Cobalt-60	<3.8E+00	UI//	< 5.4000			1	GP								pCi/L
Curium-242	<7.3E-03	UI//	< 0.0868			1	GP								pCi/L
Curium-243/244	1.9E+01	//		■		1	GP								pCi/L
Curium-245/246	<2.4E-01	U//	< 0.0396			1	GP								pCi/L
Gross alpha	2.8E+02	//		■		1	GP	2.5E+02	//		■		1	GE	pCi/L
Iodine-129	6.3E+01	U//		■		1	GP								pCi/L
Nonvolatile beta	2.2E+02	//		■		1	GP	3.0E+02	//		■		1	GE	pCi/L
Plutonium-238	<3.3E-03	UI//	< 0.2180			1	GP								pCi/L
Plutonium-239/240	<3.3E-03	UI//	< 0.1340			1	GP								pCi/L
Radium-226	1.6E+00	//				1	GP								pCi/L
Radium-228	9.7E+00	//		■		1	GP								pCi/L
Strontium-90	7.2E+01	//		■		1	GP								pCi/L
Technetium-99	3.5E+01	//				1	GP								pCi/L
Thorium-228	3.9E-01	//				1	GP								pCi/L
Thorium-230	<3.2E-02	UI//	< 0.0967			1	GP								pCi/L
Thorium-232	<0.0E+00	UI//	< 0.0967			1	GP								pCi/L
Sum of alphas	2.3E+02			■											pCi/L
Sum of betas	1.8E+02			■											pCi/L
Total radium	1.1E+01			■											pCi/L
Tritium	3.8E+02	//		■		1	GP	4.7E+02	//		■		1	GE	pCi/mL
Uranium-233/234	8.6E+01	//		■		1	GP								pCi/L
Uranium-235	6.9E+00	//				1	GP								pCi/L
Uranium-238	1.1E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 89C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75553.2 E51345.2	33.276650 °N 81.678357 °W	166.1-156.1 ft msl	281.3 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/20/98 10/27/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	214.2	214.2	ft msl
pH	5.8	5.4	pH
Sp. conductance	56	50	µS/cm
Water temperature	21.2	19.8	°C
Alkalinity as CaCO <sub>3</sub>	20	15	mg/L
Turbidity	0	1	NTU
Volumes purged	2.5	3.3	well vol
Sampling code			
Synchronous water level	214.3 (09/17/98)	213.6 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	12	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	0.84	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Copper, total recoverable	2.1	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	0.75	J/E/	NDD			1	GE	1.4	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	1.1	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,800	//				1	GE	1,800	//				1	GE	µg/L
Selenium, total recoverable	<0.85	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.065	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	18	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.9	U//	< 9.9			1	GE								µg/L
Dichloromethane	<1.9	U//O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.4	U//O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L

Notes:  
● = exceeded holding time  
■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 89C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<5.3E-02	U//	< 0.1420			1	GP								pCi/L
Cesium-137	<3.3E-01	U//	< 2.7100			1	GP								pCi/L
Cobalt-60	<1.5E+00	U//	< 3.3200			1	GP								pCi/L
Curium-242	<3.8E-03	U//	< 0.1540			1	GP								pCi/L
Curium-243/244	<6.7E-04	U//	< 0.1260			1	GP								pCi/L
Curium-245/246	<1.3E-02	U//	< 0.0876			1	GP								pCi/L
Gross alpha	<4.1E-01	U//	< 0.7030			1	GP	<1.2E+00	U//	<1.3E+00		1	GE		pCi/L
Iodine-129	1.5E+00	R/4/	Rej			1	GP								pCi/L
Nonvolatile beta	<6.5E-01	U//	< 1.0500			1	GP	<2.5E+00	U//	<1.4E+00		1	GE		pCi/L
Plutonium-238	<1.9E-02	U//	< 0.0579			1	GP								pCi/L
Plutonium-239/240	<9.3E-03	U//	< 0.1200			1	GP								pCi/L
Radium-226	<3.7E-01	U//	< 0.5660			1	GP								pCi/L
Radium-228	<3.3E-01	U//	< 1.1300			1	GP								pCi/L
Strontium-90	<3.8E-01	U//	< 1.2100			1	GP								pCi/L
Technetium-99	<4.5E+00	U//	< 22.7000			1	GP								pCi/L
Thorium-228	<1.3E-01	U//	< 0.1560			1	GP								pCi/L
Thorium-230	<6.1E-02	U//	< 0.0607			1	GP								pCi/L
Thorium-232	<4.9E-03	U//	< 0.1070			1	GP								pCi/L
Sum of alphas	2.2E-01														pCi/L
Sum of betas															
Tritium	1.9E+01	//				1	GP	1.7E+01	//			1	GE		pCi/mL
Uranium-233/234	2.2E-01	//				1	GP								pCi/L
Uranium-235	<4.6E-02	U//	< 0.1370			1	GP								pCi/L
Uranium-238	<7.2E-02	U//	< 0.1370			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 89D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75548.3 E51335.8	33.276623 °N 81.678372 °W	221.9-201.9 ft msl	281.2 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/20/98 10/09/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	218.5	218.4	ft msl
pH	4.0	3.8	pH
Sp. conductance	160	220	µS/cm
Water temperature	20.9	20.4	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	5.2	3.9	well vol
Sampling code			
Synchronous water level	218.5 (09/17/98)	217.3 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	42	//				1	GE								µg/L
Cadmium, total recoverable	1.4	//				1	GE	1.4	//				1	GE	µg/L
Chromium, total recoverable	1.8	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	16	//		■		1	GE								µg/L
Copper, total recoverable	18	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	2.6	//				1	GE	2.4	//				1	GE	µg/L
Mercury, total recoverable	2.5	//		■		1	GE								µg/L
Nickel, total recoverable	6.3	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	19,000	J/IV/1	NDD			10	GE	22,000	//		■		25	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	45	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.8	U/J/Q/	< 9.8	●		1	GE								µg/L
Dichloromethane	<3.8	U/J/O8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	3.1	J/O/1	NDD			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 89D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	5.6E+00	//		■		1	GP								pCi/L
Beta dose	49.9550			■											pCi/L
Cesium-137	<3.8E-01	U//	< 3.6900			1	GP								pCi/L
Cobalt-60	<7.8E-01	U//	< 4.1900			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.1220			1	GP								pCi/L
Curium-243/244	3.6E+00	//				1	GP								pCi/L
Curium-245/246	2.7E-01	//				1	GP								pCi/L
Gross alpha	1.6E+02	//		■		1	GP	1.3E+02	J/L/I	NDD			1	GE	pCi/L
Iodine-129	3.9E+01	//				1	GP								pCi/L
Nonvolatile beta	2.9E+02	//		■		1	GP	2.5E+02	J/L/I	NDD			1	GE	pCi/L
Plutonium-238	<0.0E+00	U//	< 0.1270			1	GP								pCi/L
Plutonium-239/240	<1.6E-01	U//	< 0.2230			1	GP								pCi/L
Radium-226	3.8E+00	//				1	GP								pCi/L
Radium-228	5.4E+00	//		■		1	GP								pCi/L
Strontium-90	7.9E+01	//		■		1	GP								pCi/L
Technetium-99	<1.4E+01	U//	< 21.4000			1	GP								pCi/L
Thorium-228	<4.2E-01	U//	< 0.5840			1	GP								pCi/L
Thorium-230	<9.2E-02	U//	< 0.2750			1	GP								pCi/L
Thorium-232	<0.0E+00	U//	< 0.2750			1	GP								pCi/L
Sum of alphas	1.4E+02			■											pCi/L
Sum of betas	1.2E+02			■											pCi/L
Total radium	9.2E+00			■											pCi/L
Tritium	5.0E+02	//		■		1	GP	6.4E+02	//		■		1	GE	pCi/mL
Uranium-233/234	5.7E+01	//		■		1	GP								pCi/L
Uranium-235	5.3E+00	//				1	GP								pCi/L
Uranium-238	7.1E+01	//		■		1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 90C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75382.9 E51148.6	33.275952 °N 81.678544 °W	168.1-158.1 ft msl	278.4 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/20/98 10/27/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	212.8	212.8	ft msl
pH	5.9	6.1	pH
Sp. conductance	170	160	µS/cm
Water temperature	21.2	22.1	°C
Alkalinity as CaCO <sub>3</sub>	5	42	mg/L
Turbidity	1	1	NTU
Volumes purged	2.4	3.0	well vol
Sampling code			
Synchronous water level	213.0 (09/17/98)	212.1 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	40	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	1.3	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	1.1	//				1	GE								µg/L
Copper, total recoverable	0.85	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	<2.0	U//	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	4.9	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	13,000	//		■		5	GE	12,000	//		■		25	GE	µg/L
Selenium, total recoverable	<0.95	U/N/	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	21	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.9	U//	< 9.9			1	GE								µg/L
Dichloromethane	<2.1	UJ/VO8/1	< 1.0			1	GE								µg/L
Phenols	4.1	J/E/	NDD			1	GE								µg/L
Tetrachloroethylene	<1.1	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.1	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 90C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<3.5E-02	U//	< 0.1760	■		1	GP								pCi/L
Beta dose	4.3125														pCi/L
Cesium-137	1.1E+01	R/4/	Rej			1	GP								pCi/L
Cobalt-60	<2.6E-01	U//	< 2.2900			1	GP								pCi/L
Curium-242	<5.1E-02	U//	< 0.2310			1	GP								pCi/L
Curium-243/244	<3.6E-02	U//	< 0.1090			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0616			1	GP								pCi/L
Gross alpha	4.6E+00	//				1	GP	<1.3E+00	U//	<9.9E-01			1	GE	pCi/L
Iodine-129	3.9E+00	//				1	GP								pCi/L
Nonvolatile beta	1.9E+01	//				1	GP	1.8E+01	//				1	GE	pCi/L
Plutonium-238	<0.0E+00	U//	< 0.0546			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	U//	< 0.0545			1	GP								pCi/L
Radium-226	<4.3E-01	U//	< 0.6610			1	GP								pCi/L
Radium-228	<8.0E-01	U//	< 0.9550			1	GP								pCi/L
Strontium-90	3.3E+00	//				1	GP								pCi/L
Technetium-99	<1.7E+01	U//	< 21.7000			1	GP								pCi/L
Thorium-228	<1.2E-01	U//	< 0.2020			1	GP								pCi/L
Thorium-230	<1.5E-02	U//	< 0.1060			1	GP								pCi/L
Thorium-232	<9.6E-03	U//	< 0.1250			1	GP								pCi/L
Sum of alphas	2.3E-01														pCi/L
Sum of betas	7.2E+00														pCi/L
Tritium	4.1E+02	//		■		1	GP	3.9E+02	//		■		1	GE	pCi/mL
Uranium-233/234	<2.3E-02	U//	< 0.1560			1	GP								pCi/L
Uranium-235	<7.1E-03	U//	< 0.1570			1	GP								pCi/L
Uranium-238	2.3E-01	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 90D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75376.9 E51140.7	33.275926 °N 81.678553 °W	225.1-205.1 ft msl	278.6 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 09/24/98 10/07/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	217.2	217.2	ft msl
pH	3.4	3.5	pH
Sp. conductance	570	720	µS/cm
Water temperature	20.6	20.8	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	0.25	0.0	well vol
Sampling code	XN	XN	
Synchronous water level	217.4 (09/17/98)	216.1 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.073	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<60	U//	< 60			20	GE								µg/L
Barium, total recoverable	120	N//				1	GE								µg/L
Cadmium, total recoverable	5.7	//		■		1	GE	7.2	//		■		1	GE	µg/L
Chromium, total recoverable	12	N//				1	GE								µg/L
Cobalt, total recoverable	13	//		■		1	GE								µg/L
Copper, total recoverable	29	N//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	18	N//				1	GE	20	//		■		1	GE	µg/L
Mercury, total recoverable	3.5	//		■		1	GE								µg/L
Nickel, total recoverable	<15	U//	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	53,000	//		■		25	GE	85,000	//		■		50	GE	µg/L
Selenium, total recoverable	<100	U//	<100			20	GE								µg/L
Silver, total recoverable	<0.069	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	45	N//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<9.5	U//	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 90D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	6.0E+00	//		■		1	GP								pCi/L
Beta dose	171.3300			■											pCi/L
Cesium-137	1.4E+01	R/A/	Rej			1	GP								pCi/L
Cobalt-60	<1.4E+00	U//	< 3.2100			1	GP								pCi/L
Curium-242	<2.3E-03	U//	< 0.2330			1	GP								pCi/L
Curium-243/244	2.6E+00	//				1	GP								pCi/L
Curium-245/246	4.6E-01	//				1	GP								pCi/L
Gross alpha	3.1E+02	J//1	NDD			1	GP	5.8E+02	//		■		1	GE	pCi/L
Iodine-129	1.2E+02	//		■		1	GP								pCi/L
Nonvolatile beta	9.1E+02	J//V/1	NDD			1	GP	1.3E+03	//		■		1	GE	pCi/L
Plutonium-238	<5.4E-01	U//	< 0.1650			1	GP								pCi/L
Plutonium-239/240	<6.5E-02	U//C/				1	GP								pCi/L
Radium-226	1.2E+01	//		■		1	GP								pCi/L
Radium-228	3.3E+00	J//2	NDD			1	GP								pCi/L
Strontium-90	4.1E+02	//		■		1	GP								pCi/L
Technetium-99	7.2E+01	//		■		1	GP								pCi/L
Thorium-228	<6.4E-01	U//	< 0.8140			1	GP								pCi/L
Thorium-230	<4.2E-02	U//	< 0.3700			1	GP								pCi/L
Thorium-232	<5.5E-02	U//	< 0.3990			1	GP								pCi/L
Sum of alphas	3.3E+02			■											pCi/L
Sum of betas	6.0E+02			■											pCi/L
Total radium	1.5E+01			■											pCi/L
Tritium	1.8E+03	//		■		1	GP	3.3E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.4E+02	//		■		1	GP								pCi/L
Uranium-235	1.1E+01	//				1	GP								pCi/L
Uranium-238	1.8E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 91C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75213.3 E50953.5	33.275259 °N 81.678728 °W	159.1-149.1 ft msl	279.3 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/06/98 10/09/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	213.1	212.9	ft msl
pH	4.6	5.1	pH
Sp. conductance	120	140	µS/cm
Water temperature	22.3	21.9	°C
Alkalinity as CaCO <sub>3</sub>	0	3	mg/L
Turbidity	2	5	NTU
Volumes purged	2.0	0.0	well vol
Sampling code		XN	
Synchronous water level	213.1 (09/17/98)	212.2 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<1.0	U//	< 1.0			5	GE								µg/L
Arsenic, total recoverable	<15	U//	< 15.0			5	GE								µg/L
Barium, total recoverable	52	//				5	GE								µg/L
Cadmium, total recoverable	2.1	J/E/	NDD			5	GE	1.7	//				1	GE	µg/L
Chromium, total recoverable	<15	U//	< 15.0			5	GE								µg/L
Cobalt, total recoverable	7.3	//		■		5	GE								µg/L
Copper, total recoverable	8.9	N//				5	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	3.2	J/E/	NDD			5	GE	1.8	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	UJ//1	< 0.20		1	GE									µg/L
Nickel, total recoverable	2.8	//				5	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	13,000	N//		■		5	GE	13,000	//		■		5	GE	µg/L
Selenium, total recoverable	<25	U//	< 25.0			5	GE								µg/L
Silver, total recoverable	1.7	J/E/	NDD			5	GE								µg/L
Thallium, total recoverable	0.72	J/E/	NDD			5	GE								µg/L
Vanadium, total recoverable	<10	U//	< 10			5	GE								µg/L
Zinc, total recoverable	18	J/E/	NDD			5	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.8	U//	< 9.8			1	GE								µg/L
Dichloromethane	<2.3	UJ/VO8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	1.8	//				1	GE								µg/L
Trichlorofluoromethane	2.3	J/O/1	NDD			1	GE								µg/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 91C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	6.5E+00	//				1	GP								pCi/L
Beta dose	15.6200			■											pCi/L
Cesium-137	<-7.6E-01	UI//	< 4.33			1	GP								pCi/L
Cobalt-60	<3.1E-01	UI//	< 4.96			1	GP								pCi/L
Curium-242	<-6.8E-03	UI//	< 0.133			1	GP								pCi/L
Curium-243/244	2.1E+01	//		■		1	GP								pCi/L
Curium-245/246	<3.3E-01	U//	< 0.132			1	GP								pCi/L
Gross alpha	2.0E+01	//		■		1	GP	1.5E+01	J/L/I	NDD			1	GE	pCi/L
Iodine-129	1.4E+01	//				1	GP								pCi/L
Nonvolatile beta	2.1E+02	//		■		1	GP	2.1E+02	J/L/I	NDD			1	GE	pCi/L
Plutonium-238	<-2.9E-02	UI//	< 0.295			1	GP								pCi/L
Plutonium-239/240	<-3.8E-02	UI//	< 0.188			1	GP								pCi/L
Radium-226	1.0E+01	//		■		1	GP								pCi/L
Radium-228	8.1E+00	//		■		1	GP								pCi/L
Strontium-90	8.7E+01	//		■		1	GP								pCi/L
Technetium-99	<1.8E+01	UI//	< 20.6000			1	GP								pCi/L
Thorium-228	<1.2E-01	UI//	< 0.3000			1	GP								pCi/L
Thorium-230	<-9.3E-03	UI//	< 0.2050			1	GP								pCi/L
Thorium-232	<3.9E-02	UI//	< 0.1160			1	GP								pCi/L
Sum of alphas	3.0E+01			■											pCi/L
Sum of betas	1.1E+02			■											pCi/L
Total radium	1.9E+01			■											pCi/L
Tritium	2.2E+02	//		■		1	GP	2.1E+02	//				1	GE	pCi/mL
Uranium-233/234	1.2E+00	//				1	GP								pCi/L
Uranium-235	1.4E-01	//				1	GP								pCi/L
Uranium-238	8.3E-01	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 91D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75207.6 E50948.6	33.275235 °N 81.678735 °W	220.9-200.9 ft msl	279.2 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/06/98 12/21/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	216.5	215.0	ft msl
pH	3.8	3.9	pH
Sp. conductance	120	110	µS/cm
Water temperature	21.7	19.9	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	4.3	3.0	well vol
Sampling code			
Synchronous water level	216.2 (09/17/98)	215.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	38	//				1	GE								µg/L
Cadmium, total recoverable	0.95	J/E/	NDD			1	GE	0.48	J/V	NDD			1	GE	µg/L
Chromium, total recoverable	0.76	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	0.96	//				1	GE								µg/L
Copper, total recoverable	5.8	N/				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	1.5	J/E/	NDD			1	GE	1.1	J/I/	NDD			1	GE	µg/L
Mercury, total recoverable	<0.12	UJ/IV/1	< 0.20			1	GE								µg/L
Nickel, total recoverable	2.0	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	11,000	N/		■		10	GE	13,000	//		■		15	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	8.0	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.8	U//	< 9.8			1	GE								µg/L
Dichloromethane	<2.5	UJ/V08/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 91D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.2E+00	//		■		1	GP								pCi/L
Beta dose	16.1250			■											pCi/L
Cesium-137	<1.0E+00	U//	< 5.0			1	GP								pCi/L
Cobalt-60	<6.4E-01	U//	< 5.4000			1	GP								pCi/L
Curium-242	<-5.3E-02	U//	< 0.1420			1	GP								pCi/L
Curium-243/244	7.6E-01	//				1	GP								pCi/L
Curium-245/246	<5.0E-02	U//	< 0.0248			1	GP								pCi/L
Gross alpha	8.2E+01	//		■		1	GP	1.3E+02	//		■		1	GE	pCi/L
Iodine-129	1.3E+01	//				1	GP								pCi/L
Nonvolatile beta	7.3E+01	//		■		1	GP	8.2E+01	//		■		1	GE	pCi/L
Plutonium-238	<2.7E-02	U//	< 0.2720			1	GP								pCi/L
Plutonium-239/240	<-7.6E-03	U//	< 0.1490			1	GP								pCi/L
Radium-226	2.7E+00	//				1	GP								pCi/L
Radium-228	5.0E+00	//				1	GP								pCi/L
Strontium-90	1.7E+01	//		■		1	GP								pCi/L
Technetium-99	<1.8E+01	U//	< 19.1000			1	GP								pCi/L
Thorium-228	<2.0E-01	U//	< 0.1470			1	GP								pCi/L
Thorium-230	<6.7E-02	U//	< 0.1180			1	GP								pCi/L
Thorium-232	<5.2E-02	U//	< 0.1000			1	GP								pCi/L
Sum of alphas	7.2E+01			■											pCi/L
Sum of betas	3.4E+01														pCi/L
Total radium	7.7E+00			■											pCi/L
Tritium	1.5E+02	//		■		1	GP	1.3E+02	//		■		1	GE	pCi/mL
Uranium-233/234	2.7E+01	//		■		1	GP								pCi/L
Uranium-235	2.1E+00	//				1	GP								pCi/L
Uranium-238	4.1E+01	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 92C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75053.2 E50564.0	33.274269 °N 81.679442 °W	157.6-147.6 ft msl	275.7 ft msl	4" PVC	V	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/07/98 10/09/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	211.9	211.6	ft msl
pH	5.8	5.1	pH
Sp. conductance	300	290	µS/cm
Water temperature	21.4	21.0	°C
Alkalinity as CaCO <sub>3</sub>	18	1	mg/L
Turbidity	2	0	NTU
Volumes purged	2.4	2.2	well vol
Sampling code			
Synchronous water level	211.7 (09/17/98)	210.7 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<1.0	U//	< 1.0			5	GE								µg/L
Arsenic, total recoverable	<15	U//	< 15.0			5	GE								µg/L
Barium, total recoverable	150	//				5	GE								µg/L
Cadmium, total recoverable	3.9	J/E/	NDD			5	GE	4.7	//				1	GE	µg/L
Chromium, total recoverable	<15	U//	< 15.0			5	GE								µg/L
Cobalt, total recoverable	21	//		■		5	GE								µg/L
Copper, total recoverable	16	//				5	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	5.4	J/EV/	NDD			5	GE	0.40	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	8.6	//				5	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	33,000	N//		■		25	GE	33,000	//		■		25	GE	µg/L
Selenium, total recoverable	<25	U//	< 25.0			5	GE								µg/L
Silver, total recoverable	<5.0	U//	< 5.0			5	GE								µg/L
Thallium, total recoverable	0.29	J/E/	NDD			5	GE								µg/L
Vanadium, total recoverable	<10	U//	< 10			5	GE								µg/L
Zinc, total recoverable	43	//				5	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.8	U//	< 9.8			1	GE								µg/L
Dichloromethane	<0.89	U/V8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	3.1	//				1	GE								µg/L
Trichlorofluoromethane	2.0	//				1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 92C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	5.0E-01	R/O/	Rej	■		1	GP								pCi/L
Beta dose	28.6483			■											pCi/L
Cesium-137	<2.1E+00	U//	< 6.13			1	GP								pCi/L
Cobalt-60	<-1.1E-01	U//	< 6.28			1	GP								pCi/L
Curium-242	-2.1E-02	R/O/	Rej			1	GP								pCi/L
Curium-243/244	4.9E-02	R/O/	Rej			1	GP								pCi/L
Curium-245/246	4.7E-01	R/O/	Rej			1	GP								pCi/L
Gross alpha	2.5E+01	//		■		1	GP	2.6E+01	J/L/I	NDD			1	GE	pCi/L
Iodine-129	1.5E+01	//		■		1	GP								pCi/L
Nonvolatile beta	2.1E+02	//		■		1	GP	2.5E+02	J/L/I	NDD			1	GE	pCi/L
Plutonium-238	<4.3E-02	U//	< 0.1920			1	GP								pCi/L
Plutonium-239/240	<-1.7E-02	U//	< 0.1370			1	GP								pCi/L
Radium-226	1.9E+01	//		■		1	GP								pCi/L
Radium-228	6.1E+00	//		■		1	GP								pCi/L
Strontium-90	9.9E+01	//		■		1	GP								pCi/L
Technetium-99	4.8E+01	//				1	GP								pCi/L
Thorium-228	<2.4E-01	U//	< 0.7330			1	GP								pCi/L
Thorium-230	<1.6E-01	U//	< 0.3890			1	GP								pCi/L
Thorium-232	<1.5E-01	U//	< 0.1540			1	GP								pCi/L
Sum of alphas	1.1E+00														pCi/L
Sum of betas	1.7E+02			■											pCi/L
Total radium	2.5E+01			■											pCi/L
Tritium	8.4E+02	//		■		1	GP	8.5E+02	//		■		1	GE	pCi/mL
Uranium-233/234	7.3E-01	//				1	GP								pCi/L
Uranium-235	<2.1E-02	U//	< 0.1130			1	GP								pCi/L
Uranium-238	3.7E-01	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 92D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75045.8 E50557.6	33.274242 °N 81.879445 °W	221.7-201.7 ft msl	275.9 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/06/98 10/07/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	215.0	214.1	ft msl
pH	3.4	3.5	pH
Sp. conductance	620	1000	µS/cm
Water temperature	21.4	19.9	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	4	2	NTU
Volumes purged	3.0	8.2	well vol
Sampling code			
Synchronous water level	214.3 (09/17/98)	213.1 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<2.0	U//	< 2.0			10	GE								µg/L
Arsenic, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Barium, total recoverable	130	//				10	GE								µg/L
Cadmium, total recoverable	9.0	J/E/	NDD			10	GE	7.0	//		■		1	GE	µg/L
Chromium, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Cobalt, total recoverable	8.5	//		■		10	GE								µg/L
Copper, total recoverable	160	//				10	GE								µg/L
Cyanide	5.7	J/EI/2	NDD			1	GE								µg/L
Lead, total recoverable	70	//		■		10	GE	20	//		■		1	GE	µg/L
Mercury, total recoverable	0.50	//				1	GE								µg/L
Nickel, total recoverable	21	N/				10	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	61,000	N/		■		25	GE	120,000	//		■		50	GE	µg/L
Selenium, total recoverable	<50	U//	< 50			10	GE								µg/L
Silver, total recoverable	<10	U//	< 10			10	GE								µg/L
Thallium, total recoverable	<25	U//	< 25.0			10	GE								µg/L
Vanadium, total recoverable	<20	U//	< 20			10	GE								µg/L
Zinc, total recoverable	120	//				10	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<11	U//	< 11			1	GE								µg/L
Dichloromethane	<4.3	UJ/VO8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 92D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.6E+01	//		■		1	GP								pCi/L
Beta dose	47.0422			■											pCi/L
Cesium-137	<-9.0E-01	U//	< 4.1300			1	GP								pCi/L
Cobalt-60	<-7.7E-01	U//	< 4.1600			1	GP								pCi/L
Curium-242	<-3.0E-02	U//	< 0.1950			1	GP								pCi/L
Curium-243/244	1.0E+01	//				1	GP								pCi/L
Curium-245/246	1.1E+00	//				1	GP								pCi/L
Gross alpha	4.4E+02	J//1	NDD			1	GP	6.6E+02	//		■		1	GE	pCi/L
Iodine-129	4.7E+01	//				1	GP				■		1	GE	pCi/L
Nonvolatile beta	8.3E+02	J//V/1	NDD			1	GP	2.2E+03	//						pCi/L
Plutonium-238	<3.9E-02	U//	< 0.1910			1	GP								pCi/L
Plutonium-239/240	<4.0E-02	U//	< 0.0595			1	GP								pCi/L
Radium-226	2.2E+01	//		■		1	GP								pCi/L
Radium-228	6.5E+00	J//2	NDD			1	GP								pCi/L
Strontium-90	2.0E+02	J//J	NDD			1	GP								pCi/L
Technetium-99	3.8E+01	//				1	GP								pCi/L
Thorium-228	<6.0E-01	U//	< 0.7340			1	GP								pCi/L
Thorium-230	<2.1E-01	U//	< 0.3390			1	GP								pCi/L
Thorium-232	<-1.8E-02	U//	< 0.3080			1	GP								pCi/L
Sum of alphas	4.7E+02			■											pCi/L
Sum of betas	2.9E+02			■											pCi/L
Total radium	2.8E+01			■											pCi/L
Tritium	9.6E+02	//		■		1	GP	3.4E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.9E+02	//		■		1	GP								pCi/L
Uranium-235	1.4E+01	//		■		1	GP								pCi/L
Uranium-238	2.4E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 93C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74897.3 E50458.3	33.273752 °N 81.679418 °W	152.0-142.0 ft msl	276.2 ft msl	4" PVC	S	Barnwell (11B <sub>1</sub> )

SAMPLE DATE 07/21/98 10/27/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	211.0	209.7	ft msl
pH	5.1	4.6	pH
Sp. conductance	300	240	µS/cm
Water temperature	21.4	21.3	°C
Alkalinity as CaCO <sub>3</sub>	2	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.2	4.9	well vol
Sampling code			
Synchronous water level	210.6 (09/17/98)	209.6 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	59	//				1	GE								µg/L
Cadmium, total recoverable	1.0	//				1	GE	1.2	//				1	GE	µg/L
Chromium, total recoverable	0.64	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	2.4	//				1	GE								µg/L
Copper, total recoverable	7.8	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	3.4	//				1	GE	0.79	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	8.7	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	33,000	/		■		25	GE	31,000	//		■		50	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	0.55	J/E/	NDD			1	GE								µg/L
Thallium, total recoverable	0.57	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	130	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<2.2	U//VO8/1	< 1.0			1	GE								µg/L
Phenols	4.5	J/E/	NDD			1	GE								µg/L
Tetrachloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<2.5	U//O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB 93C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<-1.6E-02	U//	< 0.1800	■		1	GP								pCi/L
Beta dose	2.8717														pCi/L
Cesium-137	<-7.5E-01	U//	< 3.7100			1	GP								pCi/L
Cobalt-60	<8.0E-01	U//	< 4.0800			1	GP								pCi/L
Curium-242	<-5.2E-02	U//	< 0.2360			1	GP								pCi/L
Curium-243/244	<-1.9E-02	U//	< 0.1990			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0630			1	GP								pCi/L
Gross alpha	3.7E+00	//				1	GP	<3.0E+00	U//	<1.1E+00			1	GE	pCi/L
Iodine-129	<-2.8E-01	U//	< 0.6030			1	GP								pCi/L
Nonvolatile beta	4.7E+01	//				1	GP	5.7E+01	//		■		1	GE	pCi/L
Plutonium-238	<1.7E-02	U//	< 0.0495			1	GP								pCi/L
Plutonium-239/240	<-4.0E-03	U//	< 0.0869			1	GP								pCi/L
Radium-226	2.4E+00	//				1	GP								pCi/L
Radium-228	9.5E-01	//				1	GP								pCi/L
Strontium-90	2.1E+01	//		■		1	GP								pCi/L
Technetium-99	5.1E+01	//		■		1	GP								pCi/L
Thorium-228	<1.2E-01	U//	< 0.1460			1	GP								pCi/L
Thorium-230	<8.0E-02	U//	< 0.1100			1	GP								pCi/L
Thorium-232	<-1.3E-02	U//	< 0.1230			1	GP								pCi/L
Sum of alphas	2.2E-01			■											pCi/L
Sum of betas	7.3E+01														pCi/L
Total radium	3.3E+00														pCi/L
Tritium	9.9E+02	//		■		1	GP	9.2E+02	//		■		1	GE	pCi/mL
Uranium-233/234	<1.7E-01	U//	< 0.1910			1	GP								pCi/L
Uranium-235	<0.0E+00	U//	< 0.0926			1	GP								pCi/L
Uranium-238	2.2E-01	//				1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 93D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74888.5 E50452.4	33.273723 °N 81.679416 °W	217.9-197.9 ft msl	276.1 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/21/98 10/12/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	213.4	212.3	ft msl
pH	3.8	3.7	pH
Sp. conductance	680	650	µS/cm
Water temperature	20.0	22.6	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	4	1	NTU
Volumes purged	0.099	0.0	well vol
Sampling code	XN	XN	
Synchronous water level	212.6 (09/17/98)	211.6 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Barium, total recoverable	300	//				1	GE								µg/L
Cadmium, total recoverable	9.7	//		■		1	GE	8.5	//		■		1	GE	µg/L
Chromium, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	7.5	//		■		10	GE								µg/L
Copper, total recoverable	61	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	39	N//		■		1	GE	14	//				1	GE	µg/L
Mercury, total recoverable	0.20	//				1	GE								µg/L
Nickel, total recoverable	15	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	<10	U/N//	< 50			1	GE	83,000	//		■		50	GE	µg/L
Selenium, total recoverable	<50	U//	< 50			10	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.20	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	78	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	UJ/Q/	<10	●		1	GE								µg/L
Dichloromethane	<1.6	UJ/O8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 93D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	2.4E+00	//				1	GP								pCi/L
Beta dose	133.1733			■											pCi/L
Cesium-137	<3.4E-01	U//	< 3.6200			1	GP								pCi/L
Cobalt-60	<1.7E+00	U//	< 3.2000			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.1080			1	GP								pCi/L
Curium-243/244	1.6E+00	//				1	GP								pCi/L
Curium-245/246	1.7E-01	//				1	GP								pCi/L
Gross alpha	1.7E+02	//		■		1	GP	1.8E+02	J/L/I	NDD			1	GE	pCi/L
Iodine-129	6.6E+01	//		■		1	GP								pCi/L
Nonvolatile beta	1.1E+03	//		■		1	GP	8.2E+02	//		■		1	GE	pCi/L
Plutonium-238	<8.9E-02	U//	< 0.1340			1	GP								pCi/L
Plutonium-239/240	<2.1E-02	U//	< 0.2770			1	GP								pCi/L
Radium-226	1.9E+01	//		■		1	GP								pCi/L
Radium-228	2.3E+01	//		■		1	GP								pCi/L
Strontium-90	5.0E+02	//		■		1	GP								pCi/L
Technetium-99	6.6E+01	//		■		1	GP								pCi/L
Thorium-228	1.2E+00	R/4/	Rej			1	GP								pCi/L
Thorium-230	<7.8E-02	U//	< 0.5390			1	GP								pCi/L
Thorium-232	<2.5E-02	U//	< 0.5390			1	GP								pCi/L
Sum of alphas	1.3E+02			■											pCi/L
Sum of betas	6.5E+02			■											pCi/L
Total radium	4.2E+01			■											pCi/L
Tritium	2.6E+03	//		■		1	GP	2.6E+03	//		■		1	GE	pCi/mL
Uranium-233/234	5.5E+01	//		■		1	GP								pCi/L
Uranium-235	4.4E+00	//		■		1	GP								pCi/L
Uranium-238	6.9E+01	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 94C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74869.0 E50180.0	33.273235 °N 81.680096 °W	149.8-139.8 ft msl	281.1 ft msl	4" PVC	V	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE	07/21/98	10/12/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	210.1	209.3	ft msl
pH	4.0	4.1	pH
Sp. conductance	2000	2100	µS/cm
Water temperature	20.4	23.0	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	7	7	NTU
Volumes purged	0.043	0.0	well vol
Sampling code	XN	XN	
Synchronous water level	209.3 (09/17/98)	208.3 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<150	U//	<150			50	GE								µg/L
Barium, total recoverable	790	//				1	GE								µg/L
Cadmium, total recoverable	24	//		■		1	GE	24	//		■		1	GE	µg/L
Chromium, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	440	//		■		50	GE								µg/L
Copper, total recoverable	53	//				1	GE								µg/L
Cyanide	2.7	J/E/	NDD			1	GE								µg/L
Lead, total recoverable	9.4	/N/				1	GE	230	//		■		1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	160	//		■		1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	83,000	/N/		■		50	GE	300,000	//		■		100	GE	µg/L
Selenium, total recoverable	<250	U//	<250			50	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	290	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.8	UJ/Q/	<9.8	●		1	GE								µg/L
Dichloromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Phenols	3.4	J/E/	NDD			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 94C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	4.8E-01	//		■		1	GP								pCi/L
Beta dose	191.7778			■											pCi/L
Cesium-137	8.0E+00	//				1	GP								pCi/L
Cobalt-60	<3.2E+00	U//	< 3.9600			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.1800			1	GP								pCi/L
Curium-243/244	<8.5E-02	U//	< 0.3470			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.1420			1	GP								pCi/L
Gross alpha	1.5E+02	//		■		1	GP	1.0E+02	//		■		1	GE	pCi/L
Iodine-129	1.2E+02	//		■		1	GP								pCi/L
Nonvolatile beta	2.2E+03	//		■		1	GP	1.8E+03	//		■		1	GE	pCi/L
Plutonium-238	<2.5E-02	U//	< 0.2990			1	GP								pCi/L
Plutonium-239/240	<4.8E-02	U//	< 0.1440			1	GP								pCi/L
Radium-226	6.5E+01	//		■		1	GP								pCi/L
Radium-228	2.0E+01	//		■		1	GP								pCi/L
Strontium-90	5.4E+02	//		■		1	GP								pCi/L
Technetium-99	2.5E+02	//		■		1	GP								pCi/L
Thorium-228	1.8E+00	R/A/	Rej			1	GP								pCi/L
Thorium-230	<1.1E-01	U//	< 0.8830			1	GP								pCi/L
Thorium-232	<1.2E-01	U//	< 0.3510			1	GP								pCi/L
Sum of alphas	5.0E+01			■											pCi/L
Sum of betas	9.3E+02			■											pCi/L
Total radium	8.5E+01			■											pCi/L
Tritium	1.0E+04	//		■		1	GP	1.1E+04	//		■		1	GE	pCi/mL
Uranium-233/234	2.5E+01	//		■		1	GP								pCi/L
Uranium-235	1.8E+00	//		■		1	GP								pCi/L
Uranium-238	2.3E+01	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 94DR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74869.1 E50162.9	33.273207 °N 81.680141 °W	203.4-183.3 ft msl	280.5 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/06/98 10/06/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	212.7	210.8	ft msl
pH	3.2	3.5	pH
Sp. conductance	520	550	µS/cm
Water temperature	21.3	21.2	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.3	3.2	well vol
Sampling code			
Synchronous water level	211.4 (09/17/98)	210.6 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<2.0	U//	< 2.0			10	GE								µg/L
Arsenic, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Barium, total recoverable	280	//				10	GE								µg/L
Cadmium, total recoverable	1.6	J/E/	NDD			10	GE	7.2	//		■		1	GE	µg/L
Chromium, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Cobalt, total recoverable	9.9	//		■		10	GE								µg/L
Copper, total recoverable	200	//				10	GE								µg/L
Cyanide	6.0	J/E/2	NDD			1	GE								µg/L
Lead, total recoverable	12	J/E/	NDD			10	GE	20	//		■		1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	11	N/				10	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	38,000	N/		■		25	GE	61,000	//		■		50	GE	µg/L
Selenium, total recoverable	8.7	J/E/	NDD			10	GE								µg/L
Silver, total recoverable	<10	U//	< 10			10	GE								µg/L
Thallium, total recoverable	<25	U//	< 25.0			10	GE								µg/L
Vanadium, total recoverable	<20	U//	< 20			10	GE								µg/L
Zinc, total recoverable	87	//				10	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	160	//		■		2	GE								µg/L
Dichloromethane	<1.4	U/N8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	3.5	//				1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 94DR (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.7E+01	//		■		1	GP								pCi/L
Beta dose	150.2461			■											pCi/L
Cesium-137	3.9E+01	//				1	GP								pCi/L
Cobalt-60	<2.2E-01	U//	< 3.6900			1	GP								pCi/L
Curium-242	<3.6E-02	U//	< 0.1880			1	GP								pCi/L
Curium-243/244	2.8E+01	//		■		1	GP								pCi/L
Curium-245/246	4.0E-01	//				1	GP								pCi/L
Gross alpha	1.9E+02	J//1	NDD			1	GP	6.4E+02	//		■		1	GE	pCi/L
Iodine-129	1.5E+02	//		■		1	GP				■		1	GE	pCi/L
Nonvolatile beta	3.5E+02	J//V/1	NDD			1	GP	7.1E+02	//						pCi/L
Plutonium-238	<3.4E-02	U//	< 0.2590			1	GP								pCi/L
Plutonium-239/240	<3.4E-02	U//	< 0.1010			1	GP								pCi/L
Radium-226	5.4E+00	//		■		1	GP								pCi/L
Radium-228	1.4E+00	J//2	NDD			1	GP								pCi/L
Strontium-90	6.1E+01	J//J	NDD			1	GP								pCi/L
Technetium-99	4.6E+01	//				1	GP								pCi/L
Thorium-228	<1.3E-01	U//	< 0.5690			1	GP								pCi/L
Thorium-230	<7.4E-02	U//	< 0.3090			1	GP								pCi/L
Thorium-232	<1.5E-02	U//	< 0.2600			1	GP								pCi/L
Sum of alphas	6.2E+02			■											pCi/L
Sum of betas	3.0E+02			■											pCi/L
Total radium	6.8E+00			■											pCi/L
Tritium	1.6E+03	//		■		1	GP	2.4E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.8E+02	//		■		1	GP								pCi/L
Uranium-235	2.0E+01	//		■		1	GP								pCi/L
Uranium-238	3.8E+02	//		■		1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 95CR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75001.9 E49987.8	33.273215 °N 81.680860 °W	161.9-151.9 ft msl	284 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 08/25/98 10/05/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	209.2	207.4	ft msl
pH	3.5	3.8	pH
Sp. conductance	2200	1900	µS/cm
Water temperature	21.3	22.8	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	0	1	NTU
Volumes purged	3.6	2.5	well vol
Sampling code			
Synchronous water level	207.7 (09/18/98)	206.9 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<40	U//	< 40.0000			1	WA								µg/L
Barium, total recoverable	1,100	//				1	GE								µg/L
Cadmium, total recoverable	18	//		■		1	WA	17	//		■		1	GE	µg/L
Chromium, total recoverable	1.4	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	490	//		■		1	WA								µg/L
Copper, total recoverable	63	//				1	WA								µg/L
Cyanide	<10	U/J//1	< 10			1	GE								µg/L
Lead, total recoverable	5.3	J/E/	NDD			1	WA	0.99	J//	NDD			1	GE	µg/L
Mercury, total recoverable	1.7	//				1	GE								µg/L
Nickel, total recoverable	110	//		■		1	WA								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	290,000	//		■		200	GE	260,000	//		■		100	GE	µg/L
Selenium, total recoverable	<66	U//	< 66.0000			1	WA								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	9.3	J/E/	NDD			1	WA								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	320	J//1	NDD			1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<5.0	U//	< 5.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<5.0	U//	< 5.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 95CR (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<5.8E-02	U//	< 0.5400	■		1	GP								pCi/L
Beta dose	110.4181			■											pCi/L
Cesium-137	6.6E+00	//				1	GP								pCi/L
Cobalt-60	7.4E+00	//				1	GP								pCi/L
Curium-242	<2.2E-02	U//	< 0.6360			1	GP								pCi/L
Curium-243/244	9.2E+00	J/O/1	NDD			1	TM								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.1880			1	GP								pCi/L
Gross alpha	1.2E+03	//		■		1	TM	8.7E+02	//		■		1	GE	pCi/L
Iodine-129	<7.0E+01	U/6/	< 8.6600			1	TM								pCi/L
Nonvolatile beta	3.1E+03	//		■		1	TM	1.9E+03	//		■		1	GE	pCi/L
Plutonium-238	<-1.7E-02	U//	< 0.3480			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	U//	< 0.3800			1	TM								pCi/L
Radium-226	1.3E+02	/6/		■		1	GP								pCi/L
Radium-228	5.4E+02	R/4/	Rej			1	TM								pCi/L
Strontium-90	8.8E+02	//		■		1	GP								pCi/L
Technetium-99	2.8E+02	//		■		1	TM								pCi/L
Thorium-228	<5.6E-01	U/6/	< 0.2500			1	TM								pCi/L
Thorium-230	4.4E-01	//				1	GP								pCi/L
Thorium-232	<-1.0E-02	U//	< 0.1600			1	TM								pCi/L
Sum of alphas	1.0E+03			■											pCi/L
Sum of betas	1.2E+03			■											pCi/L
Total radium	6.7E+02			■											pCi/L
Tritium	1.1E+04	//		■		1	TM	3.1E+03	//		■		1	GE	pCi/mL
Uranium-233/234	4.2E+02	/6/		■		1	GP								pCi/L
Uranium-235	3.4E+01	//		■		1	GP								pCi/L
Uranium-238	5.6E+02	//		■		1	TM								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 95DR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74991.7 E49996.0	33.273206 °N 81.680818 °W	207.0-187.0 ft msl	284.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/09/98	10/05/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	212.9	209.4	ft msl
pH	3.3	3.5	pH
Sp. conductance	940	920	µS/cm
Water temperature	23.2	23.9	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	2.6	5.4	well vol
Sampling code			
Synchronous water level	211.7 (09/18/98)	210.8 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	290	//				1	GE								µg/L
Cadmium, total recoverable	4.8	//				1	GE	4.5	//				1	GE	µg/L
Chromium, total recoverable	<2.3	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	10	//		■		1	GE								µg/L
Copper, total recoverable	66	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	15	//		■		1	GE	9.0	//				1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	18	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	94,000	//		■		50	GE	110,000	//		■		50	GE	µg/L
Selenium, total recoverable	0.74	J/E/	NDD			1	GE								µg/L
Silver, total recoverable	<0.086	U/J/CV/	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.13	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	74	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<11	U//	< 0.0108			1	GE								µg/L
Dichloromethane	<2.5	U/J/O/8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U/J/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 95DR (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	2.9E+01	//		■		1	GP								pCi/L
Beta dose	826.8222			■											pCi/L
Cesium-137	2.5E+02	//		■		1	GP								pCi/L
Cobalt-60	<8.4E-01	U//	< 3.6700			1	GP								pCi/L
Curium-242	<1.7E-01	U//	< 0.5000			1	GP								pCi/L
Curium-243/244	2.0E+01	//		■		1	GP								pCi/L
Curium-245/246	<6.5E-01	U//	< 0.9140			1	GP								pCi/L
Gross alpha	7.4E+02	//		■		1	GP	5.8E+02	//		■		1	GE	pCi/L
Iodine-129	8.1E+02	//		■		1	GP								pCi/L
Nonvolatile beta	8.4E+02	//		■		1	GP	8.5E+02	//		■		1	GE	pCi/L
Plutonium-238	<9.4E-03	U//	< 0.1120			1	GP								pCi/L
Plutonium-239/240	<1.4E-02	U//	< 0.0952			1	GP								pCi/L
Radium-226	<3.1E-01	U//	< 0.6570			1	GP								pCi/L
Radium-228	2.4E+00	//				1	GP								pCi/L
Strontium-90	1.2E+02	//		■		1	GP								pCi/L
Technetium-99	8.3E+01	//		■		1	GP								pCi/L
Thorium-228	<5.7E-01	U//	< 1.1900			1	GP								pCi/L
Thorium-230	<1.7E-01	U//C/				1	GP								pCi/L
Thorium-232	<1.0E-01	U//	< 0.8870			1	GP								pCi/L
Sum of alphas	7.9E+02			■											pCi/L
Sum of betas	1.3E+03			■											pCi/L
Total radium	2.4E+00														pCi/L
Tritium	3.5E+03	//		■		1	GP	3.6E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.8E+02	//		■		1	GP								pCi/L
Uranium-235	2.7E+01	//		■		1	GP								pCi/L
Uranium-238	5.3E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 96AR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74914.9 E49746.6	33.272629 °N 81.681326 °W	89.0-79.0 ft msl	281.2 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/20/98	10/27/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	153.8	153.4	ft msl
pH	7.9	6.7	pH
Sp. conductance	180	140	µS/cm
Water temperature	21.4	20.7	°C
Alkalinity as CaCO <sub>3</sub>	90	64	mg/L
Turbidity	1	3	NTU
Volumes purged	2.3	3.4	well vol
Sampling code			
Synchronous water level	153.8 (09/18/98)	153.5 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	0.63	J/E/	NDD			1	GE								µg/L
Barium, total recoverable	42	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	1.6	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Copper, total recoverable	0.32	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	<2.0	U//	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	0.79	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	6,000	//				3	GE	1,600	//				1	GE	µg/L
Selenium, total recoverable	<0.84	U/V/	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	2.7	J/E/	NDD			1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.9	U/J/V/O8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U/J/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 96AR (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<2.9E-03	U//	< 0.1440	■		1	GP								pCi/L
Beta dose	2.9000														pCi/L
Cesium-137	<1.3E+00	U//	< 4.5200			1	GP								pCi/L
Cobalt-60	<1.5E+00	U//	< 4.0000			1	GP								pCi/L
Curium-242	<7.7E-04	U//	< 0.1460			1	GP								pCi/L
Curium-243/244	<7.2E-02	U//	< 0.1170			1	GP								pCi/L
Curium-245/246	<1.7E-02	U//	< 0.0505			1	GP								pCi/L
Gross alpha	1.5E+00	//				1	GP	3.1E+00	J//	NDD			1	TM	pCi/L
Iodine-129	2.9E+00	//				1	GP								pCi/L
Nonvolatile beta	<9.3E-01	U//	< 1.0800			1	GP	9.4E+00	//				1	TM	pCi/L
Plutonium-238	<0.0E+00	U//	< 0.0554			1	GP								pCi/L
Plutonium-239/240	<1.8E-02	U//	< 0.0553			1	GP								pCi/L
Radium-226	4.7E-01	//				1	GP								pCi/L
Radium-228	<1.2E+00	U//	< 1.4400			1	GP								pCi/L
Strontium-90	<3.1E-01	U//	< 1.5500			1	GP								pCi/L
Technetium-99	<1.9E+01	U//	< 27.4000			1	GP								pCi/L
Thorium-228	2.0E-01	//				1	GP								pCi/L
Thorium-230	1.6E-01	//				1	GP								pCi/L
Thorium-232	<0.0E+00	U//	< 0.0695			1	GP								pCi/L
Sum of alphas	3.6E-01														pCi/L
Sum of betas	2.9E+00														pCi/L
Total radium	4.7E-01														pCi/L
Tritium	1.2E+02	//		■		1	GP	2.8E+01	//		■		1	GE	pCi/mL
Uranium-233/234	<6.9E-02	U//	< 0.1690			1	GP								pCi/L
Uranium-235	<5.5E-02	U//	< 0.0819			1	GP								pCi/L
Uranium-238	<6.9E-02	U//	< 0.1690			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 97A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75171.2 E49965.7	33.273554 °N 81.681247 °W	95.8-85.8 ft msl	286.1 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/21/98 10/29/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	152.9	152.6	ft msl
pH	7.2	6.9	pH
Sp. conductance	250	235	µS/cm
Water temperature	21.5	20.5	°C
Alkalinity as CaCO <sub>3</sub>	66	68	mg/L
Turbidity	1	1	NTU
Volumes purged	2.2	2.4	well vol
Sampling code			
Synchronous water level	152.8 (09/18/98)	152.4 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	40	//				1	GE								µg/L
Cadmium, total recoverable	0.92	J/E/	NDD			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	2.0	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Copper, total recoverable	2.9	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	0.57	J/E/	NDD			1	GE	0.41	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	1.1	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	12,000	N//		■		5	GE	14,000	//		■		5	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.20	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.9	UJ/VO8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 97A (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<1.9E-02	U//	< 0.1400	■		1	GP								pCi/L
Beta dose	8.3000														pCi/L
Cesium-137	<7.4E-01	U//	< 2.9400			1	GP								pCi/L
Cobalt-60	<1.0E-01	U//	< 3.2800			1	GP								pCi/L
Curium-242	<2.4E-02	U//	< 0.1730			1	GP								pCi/L
Curium-243/244	<3.3E-02	U//	< 0.2130			1	GP								pCi/L
Curium-245/246	<2.0E-02	U//	< 0.0602			1	GP								pCi/L
Gross alpha	2.2E+00	//				1	GP	2.6E+00	J//	NDD			1	TM	pCi/L
Iodine-129	8.3E+00	//				1	GP								pCi/L
Nonvolatile beta	5.6E+00	//				1	GP	1.3E+01	//				1	TM	pCi/L
Plutonium-238	<1.4E-02	U//	< 0.1070			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	U//	< 0.0426			1	GP								pCi/L
Radium-226	1.7E+00	//				1	GP								pCi/L
Radium-228	<6.3E-01	U//	< 1.0			1	GP								pCi/L
Strontium-90	<1.1E-01	U//	< 1.4400			1	GP								pCi/L
Technetium-99	<1.3E+01	U//	< 25.3000			1	GP								pCi/L
Thorium-228	<1.0E-01	U//	< 0.1180			1	GP								pCi/L
Thorium-230	<1.9E-02	U//	< 0.1400			1	GP								pCi/L
Thorium-232	<4.4E-03	U//	< 0.0975			1	GP								pCi/L
Sum of alphas															
Sum of betas	8.3E+00														pCi/L
Total radium	1.7E+00														pCi/L
Tritium	3.3E+02	//		■		1	GP	5.6E+02	//		■		1	TM	pCi/mL
Uranium-233/234	<2.7E-01	U//	< 0.3240			1	GP								pCi/L
Uranium-235	<2.9E-02	U//	< 0.2130			1	GP								pCi/L
Uranium-238	<3.0E-02	U//	< 0.2650			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 97C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75179.6 E49970.6	33.273580 °N 81.681250 °W	153.8-143.8 ft msl	286.1 ft msl	4" PVC	V	Barnwell (IB1)

SAMPLE DATE	07/07/98	10/06/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	210.9	209.4	ft msl
pH	3.7	3.7	pH
Sp. conductance	980	1000	µS/cm
Water temperature	22.5	21.7	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	2	6	NTU
Volumes purged		0.0	well vol
Sampling code	XN	XN	
Synchronous water level	210.0 (09/18/98)	208.9 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.078	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<150	U//	<150			50	GE								µg/L
Barium, total recoverable	260	N//				1	GE								µg/L
Cadmium, total recoverable	5.0	//				1	GE	4.7	J//	NDD			10	GE	µg/L
Chromium, total recoverable	<2.3	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	100	//		■		1	GE								µg/L
Copper, total recoverable	60	N//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	10	N//				1	GE	6.7	J//	NDD			10	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	<35	U//	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	110,000	//		■		75	GE	130,000	//		■		50	GE	µg/L
Selenium, total recoverable	<250	U//	<250			50	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.28	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	120	N//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<3.8	U/V8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	33	//		■		1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 97C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.4E+01	//					1	GP							pCi/L
Beta dose	58.3833			■											pCi/L
Cesium-137	<1.7E+00	UI//	< 2.8700			1	GP								pCi/L
Cobalt-60	<1.2E+00	UI//	< 3.1600			1	GP								pCi/L
Curium-242	<3.7E-02	UI//	< 0.1610			1	GP								pCi/L
Curium-243/244	1.1E+01	//				1	GP								pCi/L
Curium-245/246	1.1E+00	//				1	GP								pCi/L
Gross alpha	6.0E+02	J//1	NDD			1	GP	3.8E+02	//		■		1	GE	pCi/L
Iodine-129	3.7E+01	//				1	GP								pCi/L
Nonvolatile beta	6.1E+02	J//V/1	NDD			1	GP	5.4E+02	//		■		1	GE	pCi/L
Plutonium-238	1.1E+00	RJ4/	Rej			1	GP								pCi/L
Plutonium-239/240	<2.6E-01	UJ/CV/	< 0.0713NDD			1	GP								pCi/L
Radium-226	3.7E+01	//		■		1	GP								pCi/L
Radium-228	1.6E+01	J//2	NDD			1	GP								pCi/L
Strontium-90	1.7E+02	//		■		1	GP								pCi/L
Technetium-99	1.2E+02	//		■		1	GP								pCi/L
Thorium-228	<4.0E-01	UI//	< 1.0900			1	GP								pCi/L
Thorium-230	3.6E-01	//				1	GP								pCi/L
Thorium-232	<1.6E-01	UI//	< 0.8760			1	GP								pCi/L
Sum of alphas	4.8E+02			■											pCi/L
Sum of betas	3.4E+02			■											pCi/L
Total radium	5.4E+01			■											pCi/L
Tritium	3.8E+03	//		■		1	GP	4.6E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.7E+02	//		■		1	GP								pCi/L
Uranium-235	2.1E+01	//		■		1	GP								pCi/L
Uranium-238	2.6E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 97D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75188.9 E49975.5	33.273609 °N 81.681255 °W	216.9-196.9 ft msl	286 ft msl	4" PVC	V	Water Table (H2)

SAMPLE DATE 07/07/98 10/06/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	214.0	212.9	ft msl
pH	5.2	4.2	pH
Sp. conductance	310	430	µS/cm
Water temperature	24.7	21.6	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	10	5	NTU
Volumes purged		0.0	well vol
Sampling code	XN	XN	
Synchronous water level	213.2 (09/18/98)	212.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.14	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	230	N//				1	GE								µg/L
Cadmium, total recoverable	2.6	//				1	GE	3.2	//				1	GE	µg/L
Chromium, total recoverable	7.6	N//				1	GE								µg/L
Cobalt, total recoverable	8.5	//		■		1	GE								µg/L
Copper, total recoverable	33	N//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	22	N//		■		1	GE	22	//		■		1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	<14	U//	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	45,000	//		■		25	GE	56,000	//		■		50	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	58	N//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//Q/	< 10	●		1	GE								µg/L
Dichloromethane	<1.0	U//	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 97D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.0E+01	//		■		1	GP								pCi/L
Beta dose	39.3059			■											pCi/L
Cesium-137	3.4E+00	//				1	GP								pCi/L
Cobalt-60	<1.4E+00	U//	< 3.4500			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.4300			1	GP								pCi/L
Curium-243/244	8.4E+00	//				1	GP								pCi/L
Curium-245/246	<3.7E-01	U//	< 0.3710			1	GP								pCi/L
Gross alpha	4.1E+02	//		■		1	GP	4.1E+02	//		■		1	GE	pCi/L
Iodine-129	2.7E+01	//				1	GP								pCi/L
Nonvolatile beta	4.5E+02	J/C/	NDD			1	GP	5.5E+02	//		■		1	GE	pCi/L
Plutonium-238	<3.4E-03	U//	< 0.0757			1	GP								pCi/L
Plutonium-239/240	<1.0E-02	U//	< 0.0994			1	GP								pCi/L
Radium-226	5.9E+00	//		■		1	GP								pCi/L
Radium-228	5.0E+00	//				1	GP								pCi/L
Strontium-90	9.0E+01	//		■		1	GP								pCi/L
Technetium-99	3.5E+01	//				1	GP								pCi/L
Thorium-228	<4.4E-01	U//	< 1.1000			1	GP								pCi/L
Thorium-230	<3.5E-03	U//	< 0.6580			1	GP								pCi/L
Thorium-232	<1.7E-01	U//	< 0.2610			1	GP								pCi/L
Sum of alphas	4.0E+02			■											pCi/L
Sum of betas	1.6E+02			■											pCi/L
Total radium	1.1E+01			■											pCi/L
Tritium	9.9E+02	//		■		1	GP	1.1E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.1E+02	//		■		1	GP								pCi/L
Uranium-235	1.2E+01	//				1	GP								pCi/L
Uranium-238	2.6E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 98AR

SRS Coord	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75362.0 E50105.8	33.274204 °N 81.681249 °W	92.1-82.1 ft msl	284 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/20/98 10/29/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	152.0	152.1	ft msl
pH	7.2	6.9	pH
Sp. conductance	160	155	µS/cm
Water temperature	21.8	20.9	°C
Alkalinity as CaCO <sub>3</sub>	49	62	mg/L
Turbidity	1	0	NTU
Volumes purged	3.9	2.4	well vol
Sampling code			
Synchronous water level	152.0 (09/18/98)	151.8 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	1.4	J/E/	NDD			1	GE								µg/L
Barium, total recoverable	42	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	2.2	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	0.039	J/E/	NDD			1	GE								µg/L
Copper, total recoverable	0.19	J/E/	NDD			1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	<2.0	U//	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	0.54	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	3,500	//				3	GE	4,000	//				3	GE	µg/L
Selenium, total recoverable	<1.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.093	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	2.1	J/E/	NDD			1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<2.3	U//VO8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 98AR (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<1.0E-02	UI//	< 0.1530			1	GP								pCi/L
Beta dose	0.20														pCi/L
Cesium-137	<7.3E-01	UI//	< 3.4600			1	GP								pCi/L
Cobalt-60	<2.5E+00	UI//	< 5.0600			1	GP								pCi/L
Curium-242	<6.9E-03	UI//	< 0.1950			1	GP								pCi/L
Curium-243/244	<5.2E-02	UI//	< 0.0999			1	GP								pCi/L
Curium-245/246	<0.0E+00	UI//	< 0.0566			1	GP								pCi/L
Gross alpha	2.3E+00	//				1	GP	2.3E+00	//				1	GE	pCi/L
Iodine-129	<2.3E-01	UI//	< 0.7610			1	GP								pCi/L
Nonvolatile beta	4.2E+00	//				1	GP	3.9E+00	//				1	GE	pCi/L
Plutonium-238	<0.0E+00	UI//	< 0.0652			1	GP								pCi/L
Plutonium-239/240	<2.1E-02	UI//	< 0.1640			1	GP								pCi/L
Radium-226	8.3E-01	//				1	GP								pCi/L
Radium-228	1.0E+00	//				1	GP								pCi/L
Strontium-90	<6.2E-01	UI//	< 1.8300			1	GP								pCi/L
Technetium-99	<1.8E+00	UI//	< 20.3000			1	GP								pCi/L
Thorium-228	<9.1E-04	UI//	< 0.1710			1	GP								pCi/L
Thorium-230	<6.6E-02	UI//	< 0.0664			1	GP								pCi/L
Thorium-232	<0.0E+00	UI//	< 0.0664			1	GP								pCi/L
Sum of alphas	2.8E-01														pCi/L
Sum of betas	1.0E+00														pCi/L
Total radium	1.9E+00														pCi/L
Tritium	5.0E+01	//		■		1	GP	6.0E+01	//		■		1	GE	pCi/mL
Uranium-233/234	<1.3E-02	UI//	< 0.1700			1	GP								pCi/L
Uranium-235	2.8E-01	//				1	GP								pCi/L
Uranium-238	<4.8E-02	UI//	< 0.1450			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 98C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75381.2 E50116.5	33.274264 °N 81.681258 °W	158.4-148.4 ft msl	284.5 ft msl	4" PVC	V	Barnwell (IB <sub>1</sub> )

SAMPLE DATE 08/25/98 10/06/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	211.4	211.1	ft msl
pH	3.3	3.4	pH
Sp. conductance	630	570	µS/cm
Water temperature	21.2	20.4	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	0	0	NTU
Volumes purged	3.1	3.1	well vol
Sampling code			
Synchronous water level	211.7 (09/18/98)	210.2 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<75	U//1	< 75.0			25	GE								µg/L
Barium, total recoverable	200	//				1	GE								µg/L
Cadmium, total recoverable	5.3	//		■		1	GE	5.3	//		■		1	GE	µg/L
Chromium, total recoverable	0.71	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	120	//		■		1	GE								µg/L
Copper, total recoverable	26	//				1	GE								µg/L
Cyanide	4.2	J/E/1	NDD			1	GE								µg/L
Lead, total recoverable	0.42	J/E/	NDD			1	GE	0.43	J//	NDD			1	GE	µg/L
Mercury, total recoverable	0.14	J/E/	NDD			1	GE								µg/L
Nickel, total recoverable	19	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	62,000	//		■		25	GE	61,000	//		■		50	GE	µg/L
Selenium, total recoverable	<130	U//1	<125.0			25	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	1.0	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	52	J//1	NDD			1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<5.0	U//	< 5.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	44	//		■		1	GE								µg/L
Trichlorofluoromethane	<5.0	U//	< 5.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 98C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	7.9E+00	//		■		1	GP								pCi/L
Beta dose	52.3122			■											pCi/L
Cesium-137	<1.8E+00	U//	< 2.8100			1	GP								pCi/L
Cobalt-60	<4.9E-01	U//	< 2.9500			1	GP								pCi/L
Curium-242	<9.5E-02	U//	< 0.6150			1	GP								pCi/L
Curium-243/244	5.5E+00	//				1	GP								pCi/L
Curium-245/246	<2.6E-01	U//	< 0.1970			1	GP								pCi/L
Gross alpha	6.0E+02	//		■		1	GP	5.3E+02	//		■		1	GE	pCi/L
Iodine-129	3.1E+01	//				1	GP								pCi/L
Nonvolatile beta	6.2E+02	J/C/	NDD			1	GP	5.6E+02	//		■		1	GE	pCi/L
Plutonium-238	<4.9E-02	U//	< 0.3480			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	U//	< 0.1950			1	GP								pCi/L
Radium-226	2.3E+01	//		■		1	GP								pCi/L
Radium-228	<5.9E-01	U//	< 1.0900			1	GP								pCi/L
Strontium-90	1.7E+02	//		■		1	GP								pCi/L
Technetium-99	5.6E+01	//		■		1	GP								pCi/L
Thorium-228	<6.6E-01	U//	< 0.6900			1	GP								pCi/L
Thorium-230	<3.0E-01	U//	< 0.4920			1	GP								pCi/L
Thorium-232	<3.7E-02	U//	< 0.4410			1	GP								pCi/L
Sum of alphas	6.6E+02			■											pCi/L
Sum of betas	2.6E+02			■											pCi/L
Total radium	2.3E+01			■											pCi/L
Tritium	2.6E+03	//		■		1	GP	2.4E+03	//		■		1	GE	pCi/mL
Uranium-233/234	2.3E+02	//		■		1	GP								pCi/L
Uranium-235	2.2E+01	//		■		1	GP								pCi/L
Uranium-238	3.9E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 98D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75371.9 E50111.6	33.274235 °N 81.681253 °W	220.3-200.3 ft msl	284.5 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/21/98 10/08/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	215.0	214.6	ft msl
pH	4.0	3.7	pH
Sp. conductance	700	820	µS/cm
Water temperature	21.5	19.6	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	13	15	NTU
Volumes purged	0.21	0.0	well vol
Sampling code	XN	XN	
Synchronous water level	214.8 (09/18/98)	213.6 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	450	//				1	GE								µg/L
Cadmium, total recoverable	9.7	//		■		1	GE	16	//		■		1	GE	µg/L
Chromium, total recoverable	3.1	//				1	GE								µg/L
Cobalt, total recoverable	15	//		■		1	GE								µg/L
Copper, total recoverable	21	//				1	GE								µg/L
Cyanide	2.2	J/E/	NDD			1	GE								µg/L
Lead, total recoverable	2.3	N/				1	GE	13	//				1	GE	µg/L
Mercury, total recoverable	0.061	J/E/	NDD			1	GE								µg/L
Nickel, total recoverable	15	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	94,000	N/		■		50	GE	100,000	//		■		50	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.28	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	43	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U/J/Q/	< 10	●		1	GE								µg/L
Dichloromethane	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U/J/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB 98D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.3E+01	//				1	GP								pCi/L
Beta dose	94.4478			■											pCi/L
Cesium-137	<8.6E-01	UI//	< 3.3700			1	GP								pCi/L
Cobalt-60	<4.2E-01	UI//	< 4.3400			1	GP								pCi/L
Curium-242	<0.0E+00	UI//	< 0.0971			1	GP								pCi/L
Curium-243/244	1.1E+01	//				1	GP								pCi/L
Curium-245/246	5.4E-01	//				1	GP								pCi/L
Gross alpha	2.7E+02	//		■		1	GP	7.5E+02	//		■		1	GE	pCi/L
Iodine-129	4.5E+01	//				1	GP								pCi/L
Nonvolatile beta	9.1E+02	//		■		1	GP	1.4E+03	//		■		1	GE	pCi/L
Plutonium-238	<0.0E+00	UI//	< 0.1380			1	GP								pCi/L
Plutonium-239/240	<9.2E-02	UI//	< 0.1380			1	GP								pCi/L
Radium-226	1.3E+01	//		■		1	GP								pCi/L
Radium-228	2.2E+01	//		■		1	GP								pCi/L
Strontium-90	3.6E+02	//		■		1	GP								pCi/L
Technetium-99	4.3E+01	//				1	GP								pCi/L
Thorium-228	1.4E+00	R/4/	Rej			1	GP								pCi/L
Thorium-230	<1.5E-01	UI//	< 0.3610			1	GP								pCi/L
Thorium-232	<4.4E-02	UI//	< 0.3070			1	GP								pCi/L
Sum of alphas	3.3E+02			■											pCi/L
Sum of betas	4.7E+02			■											pCi/L
Total radium	3.5E+01			■											pCi/L
Tritium	3.0E+03	//		■		1	GP	3.0E+03	//		■		1	GE	pCi/mL
Uranium-233/234	8.5E+01	//		■		1	GP								pCi/L
Uranium-235	9.9E+00	//				1	GP								pCi/L
Uranium-238	2.1E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 99A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75675.6 E50314.8	33.275239 °N 81.681308 °W	102.9-92.9 ft msl	287.6 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/20/98 10/26/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	151.3	150.9	ft msl
pH	6.9	6.3	pH
Sp. conductance	160	150	µS/cm
Water temperature	20.4	20.3	°C
Alkalinity as CaCO <sub>3</sub>	38	32	mg/L
Turbidity	1	2	NTU
Volumes purged	5.6	3.3	well vol
Sampling code			
Synchronous water level	151.3 (09/18/98)	150.9 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	1.1	J/E/	NDD			1	GE								µg/L
Barium, total recoverable	28	/6/				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	<1.3	U/6/	< 3.0			1	GE								µg/L
Cobalt, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Copper, total recoverable	<0.51	U/8/	< 0.20			1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	<0.076	U/6/	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	5.8	/6/				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	6,700	/6/				3	GE	6,100	//				5	GE	µg/L
Selenium, total recoverable	<0.67	U/V6/	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<0.36	U/6/	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	<5.6	U/6/	< 5.0			1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U/J/O/1	< 1.0NDD			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U/J/Q/	< 10NDD			1	GE								µg/L
Dichloromethane	<2.5	U/J/VO8/1	< 1.0NDD			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0NDD			1	GE								µg/L
Trichloroethylene	<1.0	U/J/O/1	< 1.0NDD			1	GE								µg/L
Trichlorofluoromethane	<1.0	U/J/O/1	< 1.0NDD			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 99A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<8.8E-02	UI//	< 0.1190			1	GP								pCi/L
Cesium-137	<-1.2E+00	UI//	< 2.9400			1	GP								pCi/L
Cobalt-60	<-2.5E-01	UI//	< 3.5300			1	GP								pCi/L
Curium-242	<7.2E-04	UI//	< 0.1360			1	GP								pCi/L
Curium-243/244	4.1E-01	//				1	GP								pCi/L
Curium-245/246	<1.6E-02	UI//	< 0.0471			1	GP								pCi/L
Gross alpha	1.8E+00	//				1	GP	<8.6E-01	U//	<6.3E-01			1	GE	pCi/L
Iodine-129	<1.1E+00	UI//	< 1.3800			1	GP								pCi/L
Nonvolatile beta	1.9E+00	//				1	GP	<2.2E+00	U//	<1.1E+00			1	GE	pCi/L
Plutonium-238	<-4.1E-03	UI//	< 0.0894			1	GP								pCi/L
Plutonium-239/240	<-8.1E-03	UI//	< 0.1050			1	GP								pCi/L
Radium-226	<4.1E-01	UI//	< 0.6330			1	GP								pCi/L
Radium-228	<7.7E-01	UI//	< 0.9940			1	GP								pCi/L
Strontium-90	<-1.4E-01	UI//	< 1.4200			1	GP								pCi/L
Technetium-99	<-1.1E+01	UI//	< 22.0			1	GP								pCi/L
Thorium-228	1.6E-01	//				1	GP								pCi/L
Thorium-230	<5.8E-02	UI//	< 0.0581			1	GP								pCi/L
Thorium-232	<0.0E+00	UI//	< 0.0581			1	GP								pCi/L
Sum of alphas	9.9E-01														pCi/L
Sum of betas															
Tritium	1.7E+02	//		■		1	GP	1.7E+02	//		■		1	GE	pCi/mL
Uranium-233/234	1.9E-01	//				1	GP								pCi/L
Uranium-235	<8.6E-02	UI//	< 0.0858			1	GP								pCi/L
Uranium-238	2.2E-01	//				1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 99C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75683.7 E50320.6	33.275266 °N 81.681308 °W	167.2-157.2 ft msl	287.7 ft msl	4" PVC	S	Barnwell (11B <sub>1</sub> )

SAMPLE DATE	07/20/98	10/09/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	212.1	212.0	ft msl
pH	5.5	4.8	pH
Sp. conductance	260	270	µS/cm
Water temperature	20.1	19.4	°C
Alkalinity as CaCO <sub>3</sub>	5	2	mg/L
Turbidity	1	0	NTU
Volumes purged	6.2	4.0	well vol
Sampling code			
Synchronous water level	213.2 (09/18/98)	211.5 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.088	U/V6/	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	70	/6/				1	GE								µg/L
Cadmium, total recoverable	1.6	//				1	GE	1.3	//				1	GE	µg/L
Chromium, total recoverable	<0.76	U/6/	< 3.0			1	GE								µg/L
Cobalt, total recoverable	14	N/6/		■		1	WA								µg/L
Copper, total recoverable	<1.9	U/6/	< 0.20			1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	1.5	J/E6/	NDD			1	GE	1.6	J//	NDD			1	GE	µg/L
Mercury, total recoverable	0.14	J/E/	NDD			1	GE								µg/L
Nickel, total recoverable	8.1	J/E6/	NDD			1	WA								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	31,000	/6/		■		15	GE	30,000	//		■		25	GE	µg/L
Selenium, total recoverable	<0.88	U/V6/	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<0.11	U/6/	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	<17	U/6/	< 53.0000			1	WA								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<1.7	U/V/	< 10			1	WA								µg/L
Dichloromethane	<2.0	U/J/V08/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	75	//		■		1	WA								µg/L
Trichlorofluoromethane	3.0	//				1	WA								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 99C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<6.5E-02	UI//	< 0.1260	■		1	GP								pCi/L
Beta dose	18.8689			■											pCi/L
Cesium-137	<2.1E-01	UI//	< 3.4200			1	GP								pCi/L
Cobalt-60	<8.5E-02	UI//	< 3.1700			1	GP								pCi/L
Curium-242	<2.1E-02	UI//	< 0.2200			1	GP								pCi/L
Curium-243/244	<9.8E-03	UI//	< 0.1270			1	GP								pCi/L
Curium-245/246	<0.0E+00	UI//	< 0.0902			1	GP								pCi/L
Gross alpha	2.9E+01	//		■		1	GP	2.4E+01	J/L/I	NDD			1	GE	pCi/L
Iodine-129	1.3E+01	//				1	TM								pCi/L
Nonvolatile beta	1.2E+02	//		■		1	TM	7.4E+01	J/L/I	NDD			1	GE	pCi/L
Plutonium-238	<4.4E-03	UI//	< 0.0974			1	GP								pCi/L
Plutonium-239/240	<1.0E-02	UI//	< 0.2100			1	TM								pCi/L
Radium-226	<4.5E+00	U/6/	< 0.1600			1	TM								pCi/L
Radium-228	1.4E+01	//		■		1	TM								pCi/L
Strontium-90	2.4E+01	//		■		1	GP								pCi/L
Technetium-99	6.2E+01	//		■		1	GP								pCi/L
Thorium-228	<0.0E+00	UI//	< 0.6000			1	TM								pCi/L
Thorium-230	<0.0E+00	UI//	< 0.0729			1	GP								pCi/L
Thorium-232	<0.0E+00	UI//	< 0.0729			1	GP								pCi/L
Sum of alphas	1.3E+01			■											pCi/L
Sum of betas	1.1E+02			■											pCi/L
Total radium	1.4E+01			■											pCi/L
Tritium	1.1E+03	//		■		1	TM	1.0E+03	//		■		1	GE	pCi/mL
Uranium-233/234	5.7E+00	//				1	GP								pCi/L
Uranium-235	6.9E-01	//				1	TM								pCi/L
Uranium-238	7.0E+00	//				1	TM								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB 99D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75691.7 E50326.9	33.275294 °N 81.681307 °W	218.1-198.1 ft msl	287.6 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/20/98 10/26/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	216.2	216.5	ft msl
pH	5.4	5.4	pH
Sp. conductance	34	70	µS/cm
Water temperature	21.8	22.9	°C
Alkalinity as CaCO <sub>3</sub>	9	3	mg/L
Turbidity	1	7	NTU
Volumes purged	4.7	0.083	well vol
Sampling code		XN	
Synchronous water level	216.6 (09/18/98)	215.4 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	7.1	/6/				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	0.32	J//	NDD			1	GE	µg/L
Chromium, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	<0.084	U/6/	< 0.20			1	GE								µg/L
Copper, total recoverable	21	/6/				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	6.0	/6/				1	GE	7.6	//				1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	<0.85	U/6/	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,600	/V6/				1	GE	1,300	//				1	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	<30	U/6/	< 5.0			1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	18	//				1	GE								µg/L
Dichloromethane	<2.1	UJ/VO8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 99D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<9.6E-02	UI//	< 0.1900			1	GP								pCi/L
Beta dose	0.3625														pCi/L
Cesium-137	5.8E+00	R/4/	Rej			1	GP								pCi/L
Cobalt-60	<9.0E-01	UI//	< 2.6300			1	GP								pCi/L
Curium-242	<1.2E-02	UI//	< 0.1440			1	GP								pCi/L
Curium-243/244	1.5E-01	//				1	GP								pCi/L
Curium-245/246	<0.0E+00	UI//	< 0.0605			1	GP								pCi/L
Gross alpha	7.2E+00	//				1	GP	7.9E+00	//			1	GE		pCi/L
Iodine-129	<1.8E-01	UI//	< 0.8190			1	GP								pCi/L
Nonvolatile beta	7.9E+00	//				1	GP	1.3E+01	//			1	GE		pCi/L
Plutonium-238	<1.6E-02	UI//	< 0.1240			1	GP								pCi/L
Plutonium-239/240	<1.3E-02	UI//	< 0.0868			1	GP								pCi/L
Radium-226	<4.0E-01	UI//	< 0.5330			1	GP								pCi/L
Radium-228	<5.0E-01	UI//	< 1.1900			1	GP								pCi/L
Strontium-90	2.9E+00	//				1	GP								pCi/L
Technetium-99	<1.0E+01	UI//	< 20.5000			1	GP								pCi/L
Thorium-228	<1.7E-01	UI//	< 0.2610			1	GP								pCi/L
Thorium-230	<5.4E-02	UI//	< 0.0812			1	GP								pCi/L
Thorium-232	<4.8E-02	UI//	< 0.1430			1	GP								pCi/L
Sum of alphas	7.8E+00														pCi/L
Sum of betas	2.9E+00														pCi/L
Tritium	1.4E+01	//				1	GP	2.0E+01	//			1	GE		pCi/mL
Uranium-233/234	1.8E+00	//				1	GP								pCi/L
Uranium-235	<1.6E-01	UI//	< 0.1770			1	GP								pCi/L
Uranium-238	5.9E+00	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB100A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75534.4 E50958.4	33.275977 °N 81.679339 °W	105.8-95.8 ft msl	286 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/21/98 10/26/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	152.1	151.7	ft msl
pH	7.3	6.6	pH
Sp. conductance	180	150	µS/cm
Water temperature	20.7	21.1	°C
Alkalinity as CaCO <sub>3</sub>	60	44	mg/L
Turbidity	0	1	NTU
Volumes purged	2.1	5.1	well vol
Sampling code			
Synchronous water level	152.1 (09/21/98)	151.8 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	1.1	J/E/	NDD			1	GE								µg/L
Barium, total recoverable	39	/6/				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	0.82	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	8.8	/N/				1	WA								µg/L
Copper, total recoverable	<0.63	U/6/	< 0.20			1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	<0.47	U/6/	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	5.6	J/E/	NDD			1	WA								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	4,100	/N6/				2	GE	3,800	//				5	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.39	J/E6/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	16	J/E/	NDD			1	WA								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<0.85	U//	< 5.1			1	WA								µg/L
Dichloromethane	<2.0	U/J/O8/1	< 1.0			1	GE								µg/L
Phenols	1.8	J/E/	NDD			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U/J/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB100A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<-1.2E-02	U//	< 0.1110			1	GP								pCi/L
Cesium-137	<2.9E-02	U//	< 3.2900			1	GP								pCi/L
Beta dose	0.38														
Cobalt-60	<-4.0E-02	U//	< 2.5800			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.0717			1	GP								pCi/L
Curium-243/244	<-1.0E-02	U//	< 1.3500			1	TM								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0580			1	GP								pCi/L
Gross alpha	<1.9E+00	U/6/	< 0.6700			1	TM	<5.9E-01	U//	<6.1E-01			1	GE	pCi/L
Iodine-129	<1.2E+00	U//	< 1.2300			1	GP								pCi/L
Nonvolatile beta	4.5E+00	//				1	TM	<2.3E+00	U//	<1.1E+00			1	GE	pCi/L
Plutonium-238	<5.2E-03	U//	< 0.1460			1	GP								pCi/L
Plutonium-239/240	<-7.7E-03	U//	< 0.1000			1	GP								pCi/L
Radium-226	<4.6E-01	U/6/	< 0.2400			1	TM								pCi/L
Radium-228	1.9E+00	//				1	GP								pCi/L
Strontium-90	<-2.0E-01	U//	< 1.6500			1	GP								pCi/L
Technetium-99	<-5.4E+00	U//	< 23.5000			1	GP								pCi/L
Thorium-228	<7.7E-02	U//	< 0.1430			1	GP								pCi/L
Thorium-230	1.2E-01	//				1	GP								pCi/L
Thorium-232	<-1.4E-02	U//	< 0.1300			1	GP								pCi/L
Sum of alphas	8.9E-01														pCi/L
Sum of betas	1.9E+00														pCi/L
Total radium	1.9E+00														pCi/L
Tritium	7.3E+01	//		■		1	TM	6.7E+01	//		■		1	GE	pCi/mL
Uranium-233/234	2.4E-01	//				1	GP								pCi/L
Uranium-235	<-2.0E-02	U//	< 0.3800			1	TM								pCi/L
Uranium-238	5.2E-01	//				1	TM								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB101A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75719.0 E51191.3	33.276765 °N 81.679085 °W	102.9-92.9 ft msl	285.2 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/06/98 10/21/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	152.3	152.1	ft msl
pH	7.1	6.6	pH
Sp. conductance	140	98	µS/cm
Water temperature	20.6	20.7	°C
Alkalinity as CaCO <sub>3</sub>	32	40	mg/L
Turbidity	2	1	NTU
Volumes purged	5.0	8.4	well vol
Sampling code			
Synchronous water level	152.3 (09/21/98)	152.1 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	0.70	J/E/	NDD			1	GE								µg/L
Barium, total recoverable	34	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	1.9	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	0.083	J/E/	NDD			1	GE								µg/L
Copper, total recoverable	<0.88	U//	< 0.20			1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	0.11	J/E/	NDD			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	UJ//1	< 0.20			1	GE								µg/L
Nickel, total recoverable	0.77	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,500	N//				1	GE	1,500	//				1	GE	µg/L
Selenium, total recoverable	0.48	J/E/	NDD			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.093	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	5.1	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<2.6	UJ/V08/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB101A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<1.9E-03	U//	< 0.2020	■		1	GP								pCi/L
Beta dose	1.2500														pCi/L
Cesium-137	<4.6E-01	U//	< 3.5600			1	GP								pCi/L
Cobalt-60	<9.5E-01	U//	< 3.1200			1	GP								pCi/L
Curium-242	<2.7E-02	U//	< 0.1010			1	GP								pCi/L
Curium-243/244	<2.9E-02	U//	< 0.1930			1	GP								pCi/L
Curium-245/246	<2.1E-02	U//	< 0.1000			1	GP								pCi/L
Gross alpha	<5.7E-01	U//	< 0.6870			1	GP	<5.7E-01	U//	<5.5E-01			1	GE	pCi/L
Iodine-129	<2.2E-01	U//	< 1.0			1	GP								pCi/L
Nonvolatile beta	1.5E+00	//				1	GP	<1.6E+00	U//	<9.9E-01			1	GE	pCi/L
Plutonium-238	<8.8E-03	U//	< 0.3120			1	GP								pCi/L
Plutonium-239/240	<1.5E-02	U//	< 0.1050			1	GP								pCi/L
Radium-226	<2.6E-01	U//	< 0.6080			1	GP								pCi/L
Radium-228	<5.7E-01	U//	< 0.8980			1	GP								pCi/L
Strontium-90	1.0E+01	//		■		1	GP								pCi/L
Technetium-99	<9.8E+00	U//	< 22.4000			1	GP								pCi/L
Thorium-228	3.7E-01	//				1	GP								pCi/L
Thorium-230	<3.1E-02	U//	< 0.2240			1	GP								pCi/L
Thorium-232	<2.3E-02	U//	< 0.1560			1	GP								pCi/L
Sum of alphas	3.7E-01														pCi/L
Sum of betas	1.0E+01														pCi/L
Tritium	<4.1E-01	U//	<5.6E-01			1	GP	<5.7E-01	U//	<6.5E-01			1	GE	pCi/mL
Uranium-233/234	<1.1E-01	U//	< 0.0998			1	GP								pCi/L
Uranium-235	<8.4E-03	U//	< 0.1000			1	GP								pCi/L
Uranium-238	<3.9E-03	U//	< 0.0847			1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB102C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N73582.9 E50834.8	33.271459 °N 81.675873 °W	155.9-145.9 ft msl	201.1 ft msl	4" PVC	V	Barnwell (ItB1)

SAMPLE DATE 07/07/98 10/09/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	195.4	195.4	ft msl
pH	4.4	4.5	pH
Sp. conductance	200	200	µS/cm
Water temperature	19.4	20.0	°C
Alkalinity as CaCO <sub>3</sub>		0	mg/L
Turbidity	1	0	NTU
Volumes purged	2.6	2.5	well vol
Sampling code			
Synchronous water level	195.5 (09/17/98)	195.3 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	3.6	//				1	GE	3.2	//				1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<0.29	U//	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	24,000	N//		■		25	GE	22,000	//		■		25	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB102C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.1E+01	//				1	GP	5.6E+00	//				1	GE	pCi/L
Iodine-129															
Nonvolatile beta	2.2E+02	//		■		1	GP	2.3E+02	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	4.8E+02	//		■		1	GP	4.8E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB103C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74210.0 E49651.3	33.270915 °N 81.680207 °W	157.1-147.1 ft msl	242.4 ft msl	4" PVC	S	Bamwell (IB1)

SAMPLE DATE 07/22/98 10/27/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	204.3	201.3	ft msl
pH	7.0	5.4	pH
Sp. conductance	260	180	µS/cm
Water temperature	20.7	20.6	°C
Alkalinity as CaCO <sub>3</sub>	3	9	mg/L
Turbidity	1	1	NTU
Volumes purged	2.2	2.5	well vol
Sampling code			
Synchronous water level	203.2 (09/17/98)	201.2 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.19	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	38	//				1	GE								µg/L
Cadmium, total recoverable	0.34	J/E/	NDD			1	GE	0.29	J//	NDD			1	GE	µg/L
Chromium, total recoverable	1.7	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	0.20	J/E/	NDD			1	GE								µg/L
Copper, total recoverable	7.7	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	1.9	J/E/	NDD			1	GE	0.93	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	5.2	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	28,000	N//		■		25	GE	26,000	//		■		50	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	0.56	J/E/	NDD			1	GE								µg/L
Thallium, total recoverable	0.65	J/EV/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	35	//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB103C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<5.7E-02	UI//	< 0.0632	■		1	GP								pCi/L
Beta dose	2.0467														pCi/L
Cesium-137	<2.8E-01	UI//	< 3.5500			1	GP								pCi/L
Cobalt-60	<-9.9E-01	UI//	< 3.1000			1	GP								pCi/L
Curium-242	<0.0E+00	UI//	< 0.0719			1	GP								pCi/L
Curium-243/244	<3.7E-02	UI//	< 0.1120			1	GP								pCi/L
Curium-245/246	<2.1E-02	UI//	< 0.0632			1	GP								pCi/L
Gross alpha	9.3E-01	//				1	GP	<6.3E-01	U//	<8.5E-01			1	GE	pCi/L
Iodine-129	2.0E+00	//				1	GP								pCi/L
Nonvolatile beta	6.6E+00	//				1	GP	1.4E+01	//				1	GE	pCi/L
Plutonium-238	<-6.9E-03	UI//	< 0.1350			1	GP								pCi/L
Plutonium-239/240	<1.6E-02	UI//	< 0.0471			1	GP								pCi/L
Radium-226	<4.4E-01	UI//	< 0.5160			1	GP								pCi/L
Radium-228	<9.0E-01	UI//	< 1.0200			1	GP								pCi/L
Strontium-90	<4.2E-02	UI//	< 1.4600			1	GP								pCi/L
Technetium-99	4.2E+01	//				1	GP								pCi/L
Thorium-228	<4.7E-02	UI//	< 0.1160			1	GP								pCi/L
Thorium-230	<2.8E-02	UI//	< 0.1510			1	GP								pCi/L
Thorium-232	<-1.0E-02	UI//	< 0.1350			1	GP								pCi/L
Sum of alphas															
Sum of betas	4.4E+01														pCi/L
Tritium	5.2E+02	//		■		1	GP	5.3E+02	//		■		1	GE	pCi/mL
Uranium-233/234	<3.3E-02	UI//	< 0.0983			1	GP								pCi/L
Uranium-235	<0.0E+00	UI//	< 0.0848			1	GP								pCi/L
Uranium-238	<2.1E-02	UI//	< 0.1490			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB104C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N73872.6 E49248.6	33.269511 °N 81.680612 °W	160.7-150.7 ft msl	219.1 ft msl	4" PVC	S	Bamwell (IIB <sub>1</sub> )

<u>SAMPLE DATE</u>	07/06/98	10/27/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	202.4	200.3	ft msl
pH	5.1	4.8	pH
Sp. conductance	380	340	µS/cm
Water temperature	20.6	19.4	°C
Alkalinity as CaCO <sub>3</sub>	1	1	mg/L
Turbidity	3	1	NTU
Volumes purged	4.0	4.0	well vol
Sampling code			
Synchronous water level	201.5 (09/18/98)	200.3 (12/21/98)	ft msl

## ANALYTICAL DATA

### *Inorganic Constituents*

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	1.0	J/E/	NDD			1	GE	0.86	J//	NDD			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.78	J/E/	NDD			1	GE	0.88	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	47,000	/V/		■		25	GE	49,000	//		■		25	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### *Organic Constituents*

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB104C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	2.3E+00	//				1	GP	<1.8E+00	U//					1	GE pCi/L
Iodine-129															
Nonvolatile beta	3.0E+01	//				1	GP	3.4E+01	//					1	GE pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	9.3E+02	//		■		1	GP	9.8E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB104D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N73865.2 E49255.4	33.269506 °N 81.680579 °W	210.4-190.4 ft msl	219.2 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/06/98 10/07/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	206.5	204.9	ft msl
pH	3.7	3.7	pH
Sp. conductance	500	330	µS/cm
Water temperature	20.1	22.6	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.7	4.6	well vol
Sampling code			
Synchronous water level	205.3 (09/18/98)	204.2 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<2.0	U//	< 2.0			10	GE								µg/L
Arsenic, total recoverable	<30	U//	< 30.0000			10	GE								µg/L
Barium, total recoverable	78	//				10	GE								µg/L
Cadmium, total recoverable	1.9	J/E/	NDD			10	GE	4.1	//				1	GE	µg/L
Chromium, total recoverable	6.2	J/EV/	NDD			10	GE								µg/L
Cobalt, total recoverable	20	//		■		10	GE								µg/L
Copper, total recoverable	280	//				10	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	140	//		■		10	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	0.31	//				1	GE								µg/L
Nickel, total recoverable	8.9	N/				10	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	34,000	N/		■		25	GE	39,000	//				25	GE	µg/L
Selenium, total recoverable	5.3	J/E/	NDD			10	GE								µg/L
Silver, total recoverable	<10	U//	< 10			10	GE								µg/L
Thallium, total recoverable	<25	U//	< 25.0			10	GE								µg/L
Vanadium, total recoverable	<20	U//	< 20			10	GE								µg/L
Zinc, total recoverable	140	//				10	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.2	U/V8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB104D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	5.3E+00	//		■		1	GP								pCi/L
Beta dose	17.0344			■											pCi/L
Cesium-137	<1.3E+00	UI//	< 3.7000			1	GP								pCi/L
Cobalt-60	6.3E+00	R/4/	Rej			1	GP								pCi/L
Curium-242	<0.0E+00	UI//	< 0.0519			1	GP								pCi/L
Curium-243/244	5.7E+00	//				1	GP								pCi/L
Curium-245/246	4.0E-01	//				1	GP								pCi/L
Gross alpha	1.9E+02	J//1	NDD			1	GP	2.6E+02	//		■		1	GE	pCi/L
Iodine-129	1.7E+01	//				1	GP								pCi/L
Nonvolatile beta	2.8E+02	J//V/1	NDD			1	GP	3.8E+02	//		■		1	GE	pCi/L
Plutonium-238	<1.1E-02	UI//	< 0.1350			1	GP								pCi/L
Plutonium-239/240	<2.5E-02	UI//	< 0.1460			1	GP								pCi/L
Radium-226	1.2E+01	//		■		1	GP								pCi/L
Radium-228	<9.4E-01	UI//	< 1.1000			1	GP								pCi/L
Strontium-90	7.2E+01	J//J	NDD			1	GP								pCi/L
Technetium-99	3.1E+01	//				1	GP								pCi/L
Thorium-228	<2.3E-01	UI//	< 0.4870			1	GP								pCi/L
Thorium-230	<1.4E-01	UI//	< 0.1550			1	GP								pCi/L
Thorium-232	<3.7E-02	UI//	< 0.1550			1	GP								pCi/L
Sum of alphas	2.7E+02			■											pCi/L
Sum of betas	1.2E+02			■											pCi/L
Total radium	1.2E+01			■											pCi/L
Tritium	1.6E+03	//		■		1	GP	1.6E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.1E+02	//		■		1	GP								pCi/L
Uranium-235	9.9E+00	//				1	GP								pCi/L
Uranium-238	1.4E+02	//		■		1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB105C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75234.2 E49828.0	33.273468 °N 81.681732 °W	151.5-141.5 ft msl	285.8 ft msl	4" PVC	V	Barnwell (IB1)

SAMPLE DATE 07/09/98 10/05/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	210.3	208.2	ft msl
pH	3.2	3.6	pH
Sp. conductance	1200	1100	µS/cm
Water temperature	22.1	23.0	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	0	0	NTU
Volumes purged	2.2	2.6	well vol
Sampling code			
Synchronous water level	208.8 (09/18/98)	207.5 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<4.0	U//	< 4.0000			20	GE								µg/L
Arsenic, total recoverable	<300	U//	<300.0000			100	GE								µg/L
Barium, total recoverable	450	//				20	GE								µg/L
Cadmium, total recoverable	13	J/E/	NDD			20	GE	14	//		■		1	GE	µg/L
Chromium, total recoverable	49	J/EV/	NDD			20	GE								µg/L
Cobalt, total recoverable	330	//		■		20	GE								µg/L
Copper, total recoverable	70	//				20	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	<40	U//	< 40.0000			20	GE	0.34	J//	NDD			1	GE	µg/L
Mercury, total recoverable	0.17	J/E/	NDD			1	GE								µg/L
Nickel, total recoverable	58	//				20	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	180,000	//		■		100	GE	140,000	//		■		50	GE	µg/L
Selenium, total recoverable	<500	U//	<500.0000			100	GE								µg/L
Silver, total recoverable	<20	U/J/C/	< 20			20	GE								µg/L
Thallium, total recoverable	1.8	J/E/	NDD			20	GE								µg/L
Vanadium, total recoverable	<40	U//	< 40.0000			20	GE								µg/L
Zinc, total recoverable	170	//				20	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U/J/Q/	< 10	●		1	GE								µg/L
Dichloromethane	<2.3	U/J/O8/1	< 1.0			1	GE								µg/L
Phenols	4.2	J/E/	NDD			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<20	U/J/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U/J/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB105C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.9E+01	//		■		1	GP								pCi/L
Beta dose	98.9744			■											pCi/L
Cesium-137	<7.7E-01	U//	< 3.6300			1	GP								pCi/L
Cobalt-60	<2.8E+00	U//	< 4.3700			1	GP								pCi/L
Curium-242	<7.6E-02	U//	< 0.9690			1	GP								pCi/L
Curium-243/244	1.4E+01	//				1	GP								pCi/L
Curium-245/246	<2.7E-01	U//	< 0.4010			1	GP								pCi/L
Gross alpha	6.4E+02	//		■		1	GP	3.8E+02	//		■		1	GE	pCi/L
Iodine-129	5.2E+01	//		■		1	GP								pCi/L
Nonvolatile beta	9.2E+02	//		■		1	GP	8.4E+02	//		■		1	GE	pCi/L
Plutonium-238	<8.0E-03	U//	< 0.0957			1	GP								pCi/L
Plutonium-239/240	<3.7E-03	U//	< 0.0811			1	GP								pCi/L
Radium-226	7.9E+01	//		■		1	GP								pCi/L
Radium-228	2.9E+00	//				1	GP								pCi/L
Strontium-90	3.7E+02	//		■		1	GP								pCi/L
Technetium-99	1.3E+02	//		■		1	GP								pCi/L
Thorium-228	9.0E-01	//				1	GP								pCi/L
Thorium-230	2.8E-01	//				1	GP								pCi/L
Thorium-232	<2.2E-02	U//	< 0.4910			1	GP								pCi/L
Sum of alphas	4.4E+02			■											pCi/L
Sum of betas	5.5E+02			■											pCi/L
Total radium	8.1E+01			■											pCi/L
Tritium	6.3E+03	//		■		1	GP	5.6E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.9E+02	//		■		1	GP								pCi/L
Uranium-235	1.7E+01	//		■		1	GP								pCi/L
Uranium-238	2.1E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB105DR

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75258.1 E49841.0	33.273542 °N 81.681744 °W	208.6-188.5 ft msl	285.6 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/22/98 10/09/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	213.7	212.9	ft msl
pH	3.8	4.0	pH
Sp. conductance	90	71	µS/cm
Water temperature	20.4	21.0	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	3.0	3.4	well vol
Sampling code			
Synchronous water level	213.2 (09/18/98)	212.1 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.15	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	94	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	1.7	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	4.4	//				1	GE								µg/L
Copper, total recoverable	24	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	4.8	//				1	GE	1.3	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	2.4	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	4,100	N//				3	GE	5,700	//				5	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<0.18	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	8.4	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB105DR (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	6.0E-01	//		■		1	GP								pCi/L
Beta dose	13.6250			■											pCi/L
Cesium-137	<6.6E-01	UVI	< 3.4000			1	GP								pCi/L
Cobalt-60	<-6.6E-01	UVI	< 3.2100			1	GP								pCi/L
Curium-242	<1.8E-02	UVI	< 0.1210			1	GP								pCi/L
Curium-243/244	6.4E-01	//				1	GP								pCi/L
Curium-245/246	<0.0E+00	UVI	< 0.0606			1	GP								pCi/L
Gross alpha	1.5E+02	//		■		1	GP	7.8E+01	//		■		1	GE	pCi/L
Iodine-129	1.2E+01	//				1	GP								pCi/L
Nonvolatile beta	7.1E+01	//		■		1	GP	7.5E+01	//		■		1	GE	pCi/L
Plutonium-238	<-2.2E-02	UVI	< 0.1310			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	UVI	< 0.0457			1	GP								pCi/L
Radium-226	3.8E+00	//				1	GP								pCi/L
Radium-228	<3.7E+00	UVI	< 0.9810			1	GP								pCi/L
Strontium-90	1.3E+01	//		■		1	GP								pCi/L
Technetium-99	<-4.2E+00	UVI	< 25.0			1	GP								pCi/L
Thorium-228	3.2E-01	//				1	GP								pCi/L
Thorium-230	<-3.2E-02	UVI	< 0.1910			1	GP								pCi/L
Thorium-232	<1.2E-02	UVI	< 0.1380			1	GP								pCi/L
Sum of alphas	1.5E+02			■											pCi/L
Sum of betas	2.5E+01														pCi/L
Total radium	3.8E+00														pCi/L
Tritium	4.1E+01	//		■		1	GP	4.6E+01	//		■		1	GE	pCi/mL
Uranium-233/234	3.6E+01	//		■		1	GP								pCi/L
Uranium-235	4.5E+00	//				1	GP								pCi/L
Uranium-238	1.0E+02	//		■		1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB106C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74190.1 E50651.3	33.272503 °N 81.677536 °W	166.0-156.0 ft msl	235.1 ft msl	4" PVC	V	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/07/98 10/09/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	202.2		ft msl
pH	5.4	5.2	pH
Sp. conductance	520	510	µS/cm
Water temperature	19.7	21.0	°C
Alkalinity as CaCO <sub>3</sub>	9	7	mg/L
Turbidity	3	2	NTU
Volumes purged	3.4		well vol
Sampling code		S	
Synchronous water level	201.8 (09/17/98)	201.3 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	7.0	J/E/	NDD			25	GE	6.9	//		■		1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.6	J/EV/	NDD			25	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	62,000	N/		■		50	GE	63,000	//		■		25	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB106C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	4.3E+01	//		■		1	GP	2.9E+01	//		■		1	GE	pCi/L
Iodine-129															
Nonvolatile beta	5.6E+02	//		■		1	GP	6.0E+02	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.1E+03	//		■		1	GP	1.1E+03	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB106D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74193.0 E50636.8	33.272485 °N 81.677580 °W	222.9-202.9 ft msl	234.9 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/07/98 10/30/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	207.6	206.0	ft msl
pH	6.6	5.9	pH
Sp. conductance	120	80	µS/cm
Water temperature	24.7	14.5	°C
Alkalinity as CaCO <sub>3</sub>	57	18	mg/L
Turbidity	9	17	NTU
Volumes purged	0.0	0.49	well vol
Sampling code	XN	XN	
Synchronous water level	206.7 (09/17/98)	205.9 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	3.7	N/I				5	GE								µg/L
Arsenic, total recoverable	3.1	J/E/	NDD			5	GE								µg/L
Barium, total recoverable	110	//				5	GE								µg/L
Cadmium, total recoverable	3.2	J/E/	NDD			5	GE	0.39	J/I/	NDD			1	GE	µg/L
Chromium, total recoverable	5.7	J/E/	NDD			5	GE								µg/L
Cobalt, total recoverable	1.8	//				5	GE								µg/L
Copper, total recoverable	380	//				5	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	220	N/I		■		5	GE	22	//		■		1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	86	//				5	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	330	N/I				1	GE	1,400	//				1	GE	µg/L
Selenium, total recoverable	<25	U//	< 25.0			5	GE								µg/L
Silver, total recoverable	<5.0	U//	< 5.0			5	GE								µg/L
Thallium, total recoverable	<13	U//	< 12.5			5	GE								µg/L
Vanadium, total recoverable	17	N/I		■		5	GE								µg/L
Zinc, total recoverable	8,400	//		■		5	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.0	U//	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB106D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<1.3E-02	UI//	< 0.0868			1	GP								pCi/L
Beta dose	0.4500														pCi/L
Cesium-137	<2.2E-01	UI//	< 3.5400			1	GP								pCi/L
Cobalt-60	<1.8E+00	UI//	< 3.0200			1	GP								pCi/L
Curium-242	<0.0E+00	UI//	< 0.0522			1	GP								pCi/L
Curium-243/244	<8.2E-02	UN//	< 0.0494			1	GP								pCi/L
Curium-245/246	<3.3E-02	UI//	< 0.0493			1	GP								pCi/L
Gross alpha	<1.3E-01	UI//	< 0.8630			1	GP	2.6E+00	//			1	GE		pCi/L
Iodine-129	<8.8E-01	UI//	< 0.9910			1	GP								pCi/L
Nonvolatile beta	4.3E+00	//				1	GP	4.8E+00	//			1	GE		pCi/L
Plutonium-238	<6.7E-02	UI//	< 0.2360			1	GP								pCi/L
Plutonium-239/240	<1.9E-02	UI//	< 0.1270			1	GP								pCi/L
Radium-226	<3.6E-01	UI//	< 0.6690			1	GP								pCi/L
Radium-228	<5.4E-01	UI//	< 0.7950			1	GP								pCi/L
Strontium-90	3.6E+00	//				1	GP								pCi/L
Technetium-99	<3.0E+00	UI//	< 21.6000			1	GP								pCi/L
Thorium-228	<3.2E-02	UI//	< 0.6000			1	GP								pCi/L
Thorium-230	<1.3E-01	UI//	< 0.2440			1	GP								pCi/L
Thorium-232	<0.0E+00	UI//	< 0.1390			1	GP								pCi/L
Sum of alphas	1.2E-01														pCi/L
Sum of betas	3.6E+00														pCi/L
Tritium	1.2E+01	//				1	GP	1.2E+01	//			1	GE		pCi/mL
Uranium-233/234	<1.4E-01	UN//	< 0.0916			1	GP								pCi/L
Uranium-235	<1.3E-02	UI//	< 0.0919			1	GP								pCi/L
Uranium-238	1.2E-01	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB107C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75184.0 E51158.1	33.275528 °N 81.678133 °W	160.8-150.8 ft msl	270.9 ft msl	4" PVC	S	Barnwell (IB <sub>1</sub> )

SAMPLE DATE 07/22/98 10/27/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	213.0	212.6	ft msl
pH	6.2	5.9	pH
Sp. conductance	170	130	µS/cm
Water temperature	21.2	21.2	°C
Alkalinity as CaCO <sub>3</sub>	29	19	mg/L
Turbidity	4	4	NTU
Volumes purged	2.1	2.4	well vol
Sampling code			
Synchronous water level	213.3 (09/18/98)	212.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	37	//				1	GE								µg/L
Cadmium, total recoverable	0.56	J/E/	NDD			1	GE	0.37	J//	NDD			1	GE	µg/L
Chromium, total recoverable	1.3	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	0.24	//				1	GE								µg/L
Copper, total recoverable	4.0	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	0.88	J/E/	NDD			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	3.2	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	8,700	N//				100	WA	6,300	//				5	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	0.62	J/E/	NDD			1	WA								µg/L
Thallium, total recoverable	<0.072	U/N6/	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	28	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<1.7	U/N/	< 5.1			1	WA								µg/L
Dichloromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	1.3	J/E/	NDD			1	WA								µg/L
Trichloroethylene	1.4	J/E/	NDD			1	WA								µg/L
Trichlorofluoromethane	5.2	//				1	WA								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB107C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<2.7E-02	UI//	< 0.0548	■		1	GP								pCi/L
Beta dose	16.1250														pCi/L
Cesium-137	7.3E+00	R/4/	Rej			1	GP								pCi/L
Cobalt-60	<-8.0E-02	UI//	< 4.1700			1	TM								pCi/L
Curium-242	<0.0E+00	UI//	< 0.0577			1	GP								pCi/L
Curium-243/244	<-8.8E-03	UI//	< 0.1140			1	GP								pCi/L
Curium-245/246	<0.0E+00	UI//	< 0.0548			1	GP								pCi/L
Gross alpha	5.3E+00	//				1	TM	<9.9E-01	U//	<1.1E+00			1	GE	pCi/L
Iodine-129	1.3E+01	//				1	TM								pCi/L
Nonvolatile beta	5.6E+01	//		■		1	TM	2.7E+01	//				1	GE	pCi/L
Plutonium-238	<-1.4E-02	UI//	< 0.1400			1	GP								pCi/L
Plutonium-239/240	<8.8E-03	UI//	< 0.1250			1	GP								pCi/L
Radium-226	1.8E+00	//				1	GP								pCi/L
Radium-228	1.4E+01	R/4/	Rej			1	TM								pCi/L
Strontium-90	2.5E+01	//		■		1	GP								pCi/L
Technetium-99	<2.8E-01	UI//	< 22.5			1	GP								pCi/L
Thorium-228	2.6E-01	R/4/	Rej			1	GP								pCi/L
Thorium-230	<1.1E-01	UI//	< 0.4700			1	TM								pCi/L
Thorium-232	<0.0E+00	UI//	< 0.1280			1	GP								pCi/L
Sum of alphas															
Sum of betas	3.7E+01														pCi/L
Total radium	1.6E+01			■											pCi/L
Tritium	1.4E+02	//		■		1	TM	1.0E+02	//		■		1	GE	pCi/mL
Uranium-233/234	<1.0E-01	UI//	< 0.3090			1	GP								pCi/L
Uranium-235	<-2.0E-02	UI/JC/				1	TM								pCi/L
Uranium-238	<9.0E-02	UI//	< 0.3300			1	TM								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB107D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75177.2 E51149.8	33.275499 °N 81.678141 °W	220.9-200.9 ft msl	271 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/10/98	10/07/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	216.9	216.3	ft msl
pH	3.9	3.8	pH
Sp. conductance	320	130	µS/cm
Water temperature	22.8	19.8	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	5	NTU
Volumes purged	2.3	2.4	well vol
Sampling code			
Synchronous water level	216.6 (09/18/98)	215.4 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<1.0	U//	< 1.0			5	GE								µg/L
Arsenic, total recoverable	<15	U//	< 15.0			5	GE								µg/L
Barium, total recoverable	110	//				5	GE								µg/L
Cadmium, total recoverable	1.6	J/E/	NDD			5	GE	0.79	J//	NDD			1	GE	µg/L
Chromium, total recoverable	6.9	J/EV/	NDD			5	GE								µg/L
Cobalt, total recoverable	17	//		■		5	GE								µg/L
Copper, total recoverable	<1.0	U//	< 1.0			5	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	16	//		■		5	GE	2.6	//				1	GE	µg/L
Mercury, total recoverable	3.2	//		■		1	GE								µg/L
Nickel, total recoverable	14	//				5	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	30,000	/6/		■		25	GE	11,000	//				5	GE	µg/L
Selenium, total recoverable	<25	U//	< 25.0			5	GE								µg/L
Silver, total recoverable	<5.0	U/J/C/	< 5.0NDD		5	GE									µg/L
Thallium, total recoverable	<13	U//	< 12.5			5	GE								µg/L
Vanadium, total recoverable	<10	U//	< 10			5	GE								µg/L
Zinc, total recoverable	83	//				5	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<2.5	U/J/O8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U/J/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U/J/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB107D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.5E+01	//		■		1	GP								pCi/L
Beta dose	106.7378			■											pCi/L
Cesium-137	<4.0E-02	UI//	< 4.1900			1	GP								pCi/L
Cobalt-60	<6.1E-01	UI//	< 3.6900			1	GP								pCi/L
Curium-242	<1.7E-01	UI//	< 0.4980			1	GP								pCi/L
Curium-243/244	4.5E+00	//				1	GP								pCi/L
Curium-245/246	<2.9E-01	UI//	< 0.4350			1	GP								pCi/L
Gross alpha	3.0E+02	//		■		1	GP	1.8E+02	//		■		1	GE	pCi/L
Iodine-129	8.5E+01	//		■		1	GP								pCi/L
Nonvolatile beta	4.6E+02	//		■		1	GP	1.8E+02	//		■		1	GE	pCi/L
Plutonium-238	<0.0E+00	UI//	< 0.0490			1	GP								pCi/L
Plutonium-239/240	<-3.9E-03	UI//	< 0.0861			1	GP								pCi/L
Radium-226	1.4E+01	//		■		1	GP								pCi/L
Radium-228	2.1E+00	//				1	GP								pCi/L
Strontium-90	1.7E+02	//		■		1	GP								pCi/L
Technetium-99	6.1E+01	//		■		1	GP								pCi/L
Thorium-228	<2.7E-01	UI//	< 1.3000			1	GP								pCi/L
Thorium-230	<8.6E-02	UI/J/C/				1	GP								pCi/L
Thorium-232	<8.2E-02	UI//	< 0.5700			1	GP								pCi/L
Sum of alphas	4.7E+02			■											pCi/L
Sum of betas	3.1E+02			■											pCi/L
Total radium	1.6E+01			■											pCi/L
Tritium	2.9E+02	//		■		1	GP	6.0E+01	//		■		1	GE	pCi/mL
Uranium-233/234	1.9E+02	//		■		1	GP								pCi/L
Uranium-235	2.1E+01	//		■		1	GP								pCi/L
Uranium-238	2.4E+02	//		■		1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB108D

<u>SRS Coord</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N76260.7 E51142.3	33.277883 °N 81.680266 °W	223.8-203.8 ft msl	298 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/21/98 10/21/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	220.4	220.6	ft msl
pH	4.2	5.2	pH
Sp. conductance	54	28	µS/cm
Water temperature	23.5	20.9	°C
Alkalinity as CaCO <sub>3</sub>	18	2	mg/L
Turbidity	1	3	NTU
Volumes purged	2.5	0.091	well vol
Sampling code		XN	
Synchronous water level	220.8 (08/17/98)	220.0 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	3.3	//				1	GE	7.1	//				1	GE	µg/L
Mercury, total recoverable								0.20	//				1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,400	//				1	GE	1,100	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB108D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.3E+00	//				1	GP	<1.5E+00	U//					1	GE pCi/L
Iodine-129															
Nonvolatile beta	<1.1E+00	U//	< 1.1300			1	GP	<2.0E+00	U//					1	GE pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.4E+01	//				1	GP	1.1E+01	//					1	GE pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB109D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75855.9 E50488.6	33.275921 °N 81.681200 °W	225.8-205.8 ft msl	293.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/07/98 10/21/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	216.9	217.3	ft msl
pH	6.8	6.0	pH
Sp. conductance	80	86	µS/cm
Water temperature	26.9	21.1	°C
Alkalinity as CaCO <sub>3</sub>	27	26	mg/L
Turbidity	6	12	NTU
Volumes purged	0.14	0.13	well vol
Sampling code	XN	XN	
Synchronous water level	217.6 (09/21/98)	216.3 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.22	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	0.98	J/E/	NDD			1	GE								µg/L
Barium, total recoverable	13	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	3.8	//				1	GE								µg/L
Cobalt, total recoverable	0.48	//				1	GE								µg/L
Copper, total recoverable	20	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	19	/N/				1	GE	8.7	//				1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	5.0	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	640	/N/				1	GE	600	//				1	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	280	//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<11	U//	< 11			1	GE								µg/L
Dichloromethane	<1.0	U//	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB109D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<8.0E-02	U//	< 0.0522			1	GP								pCi/L
Cesium-137	<4.6E-01	U//	< 3.6700			1	GP								pCi/L
Cobalt-60	1.0E+01	R/4/	Rej			1	GP								pCi/L
Curium-242	<8.8E-03	U//	< 0.1140			1	GP								pCi/L
Curium-243/244	<8.4E-03	U//	< 0.1080			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0522			1	GP								pCi/L
Gross alpha	1.3E+00	//				1	GP	4.7E+00	//				1	GE	pCi/L
Iodine-129	<4.7E-01	U//	< 0.4840			1	GP								pCi/L
Nonvolatile beta	2.9E+00	//				1	GP	4.6E+00	//				1	GE	pCi/L
Plutonium-238	<1.0E-07	U//	< 0.2300			1	GP								pCi/L
Plutonium-239/240	<8.3E-03	U//	< 0.0995			1	GP								pCi/L
Radium-226	<5.0E-01	U//	< 0.7650			1	GP								pCi/L
Radium-228	<1.5E-01	U//	< 1.1500			1	GP								pCi/L
Strontium-90	<8.0E-02	U//	< 1.4600			1	GP								pCi/L
Technetium-99	<1.3E+00	U//	< 21.0			1	GP								pCi/L
Thorium-228	<2.4E-01	U//	< 0.4530			1	GP								pCi/L
Thorium-230	<5.9E-02	U//	< 0.2190			1	GP								pCi/L
Thorium-232	<3.5E-02	U//	< 0.2350			1	GP								pCi/L
Sum of alphas															
Sum of betas															
Tritium	1.3E+01	//				1	GP	1.3E+01	//				1	GE	pCi/mL
Uranium-233/234	<2.9E-02	U//	< 0.0862			1	GP								pCi/L
Uranium-235	<1.6E-02	U//	< 0.0491			1	GP								pCi/L
Uranium-238	<2.9E-02	U//	< 0.0862			1	GP								pCi/L

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB110C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74190.7 E50150.6	33.271687 °N 81.678855 °W	147.2-137.2 ft msl	234.5 ft msl	4" PVC	S	Barnwell (IB1)

SAMPLE DATE 07/22/98 10/28/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	202.2	200.8	ft msl
pH	5.9	5.0	pH
Sp. conductance	570	700	µS/cm
Water temperature	21.1	21.4	°C
Alkalinity as CaCO <sub>3</sub>	8	5	mg/L
Turbidity	1	1	NTU
Volumes purged	2.1	2.3	well vol
Sampling code			
Synchronous water level	201.5 (09/17/98)	200.9 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	130	//				1	GE								µg/L
Cadmium, total recoverable	1.6	//				1	GE	2.3	//				1	GE	µg/L
Chromium, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	8.7	N//		■		1	WA								µg/L
Copper, total recoverable	15	/B/				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	2.3	//				1	GE	1.3	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	20	J/E/	NDD			1	WA								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	63,000	N//		■		500	WA	85,000	//		■		50	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<0.22	U/N//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	150	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<0.65	U/N//	< 5.1			1	WA								µg/L
Dichloromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB110C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<2.6E-02	U//	< 0.1040	■		1	GP								pCi/L
Beta dose	25.1222														pCi/L
Cesium-137	<3.3E-01	U//	< 2.8000			1	GP								pCi/L
Cobalt-60	<7.4E-01	U//	< 3.7700			1	TM								pCi/L
Curium-242	<0.0E+00	U//	< 0.6800			1	TM								pCi/L
Curium-243/244	<1.9E-02	U//	< 0.1820			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0785			1	GP								pCi/L
Gross alpha	9.2E+00	//				1	TM	6.7E+00	//				1	GE	pCi/L
Iodine-129	2.5E+01	//				1	TM								pCi/L
Nonvolatile beta	8.7E+01	//		■		1	TM	8.1E+01	//		■		1	GE	pCi/L
Plutonium-238	<4.7E-03	U//	< 0.0993			1	GP								pCi/L
Plutonium-239/240	<9.5E-03	U//	< 0.1620			1	GP								pCi/L
Radium-226	2.6E+00	//				1	GP								pCi/L
Radium-228	9.7E+00	R4/	Rej			1	TM								pCi/L
Strontium-90	5.4E+00	J/C/	NDD			1	TM								pCi/L
Technetium-99	1.1E+02	//		■		1	GP								pCi/L
Thorium-228	<5.0E-02	U//	< 0.5100			1	TM								pCi/L
Thorium-230	<5.5E-02	U//	< 0.1640			1	GP								pCi/L
Thorium-232	<7.5E-03	U//	< 0.1640			1	GP								pCi/L
Sum of alphas				■											
Sum of betas	1.4E+02			■											pCi/L
Total radium	1.2E+01			■											pCi/L
Tritium	2.0E+03	//		■		1	TM	1.9E+03	//		■		1	GE	pCi/mL
Uranium-233/234	<1.8E-02	U//	< 0.2230			1	GP								pCi/L
Uranium-235	<5.4E-02	U//	< 0.3770			1	GP								pCi/L
Uranium-238	<0.0E+00	U//	< 0.2140			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB110D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74193.3 E50141.6	33.271678 °N 81.678884 °W	211.1-191.1 ft msl	234.5 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/06/98 10/07/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	208.3	205.5	ft msl
pH	3.4	3.4	pH
Sp. conductance	920	990	µS/cm
Water temperature	20.9	21.4	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.7	3.9	well vol
Sampling code			
Synchronous water level	206.0 (09/17/98)	205.4 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.067	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	190	N//				1	GE								µg/L
Cadmium, total recoverable	5.4	//		■		1	GE	6.1	//		■		1	GE	µg/L
Chromium, total recoverable	<3.8	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	9.1	//		■		1	GE								µg/L
Copper, total recoverable	53	N//				1	GE								µg/L
Cyanide	5.0	J/EI/2	NDD			1	GE								µg/L
Lead, total recoverable	4.8	N//				1	GE	0.70	J//	NDD			1	GE	µg/L
Mercury, total recoverable	0.18	J/E/	NDD			1	GE								µg/L
Nickel, total recoverable	<17	U//	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	110,000	//		■		75	GE	110,000	//		■		50	GE	µg/L
Selenium, total recoverable	0.44	J/E/	NDD			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	71	N//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U/J/Q/	< 10	●		1	GE								µg/L
Dichloromethane	<3.4	U/V/8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	2.5	//				1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB110D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	2.0E+01	//		■		1	GP								pCi/L
Beta dose	565.0967			■											pCi/L
Cesium-137	<1.5E+00	U//	< 4.1600			1	GP								pCi/L
Cobalt-60	<2.4E+00	U//	< 4.1900			1	GP								pCi/L
Curium-242	<3.1E-02	U//	< 0.0926			1	GP								pCi/L
Curium-243/244	3.0E+01	/6/		■		1	GP								pCi/L
Curium-245/246	3.6E-01	//				1	GP								pCi/L
Gross alpha	5.9E+02	J//1	NDD			1	GP	6.7E+02	//		■		1	GE	pCi/L
Iodine-129	5.3E+02	//		■		1	GP								pCi/L
Nonvolatile beta	8.8E+02	J//V/1	NDD			1	GP	1.1E+03	//		■		1	GE	pCi/L
Plutonium-238	2.1E+00	R/A/	Rej			1	GP								pCi/L
Plutonium-239/240	4.5E-01	J/C/	NDD			1	GP								pCi/L
Radium-226	1.3E+01	//		■		1	GP								pCi/L
Radium-228	<5.2E-01	U//	< 1.3400			1	GP								pCi/L
Strontium-90	2.8E+02	//		■		1	GP								pCi/L
Technetium-99	8.7E+01	//		■		1	GP								pCi/L
Thorium-228	<4.9E-01	U//	< 0.5540			1	GP								pCi/L
Thorium-230	<1.3E-01	U//	< 0.3090			1	GP								pCi/L
Thorium-232	<1.7E-02	U//	< 0.2240			1	GP								pCi/L
Sum of alphas	6.9E+02			■											pCi/L
Sum of betas	9.0E+02			■											pCi/L
Total radium	1.3E+01			■											pCi/L
Tritium	4.6E+03	//		■		1	GP	4.2E+03	//		■		1	GE	pCi/mL
Uranium-233/234	1.2E+02	//		■		1	GP								pCi/L
Uranium-235	1.7E+01	//		■		1	GP								pCi/L
Uranium-238	5.0E+02	//		■		1	GP								pCi/L

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB111C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75383.3 E51526.3	33.276569 °N 81.677550 °W	169.0-159.0 ft msl	276.3 ft msl	4" PVC	S	Barnwell (IB1)

SAMPLE DATE 07/08/98 10/23/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	214.0	214.3	ft msl
pH	5.7	5.7	pH
Sp. conductance	50	50	µS/cm
Water temperature	21.1	19.1	°C
Alkalinity as CaCO <sub>3</sub>	6	10	mg/L
Turbidity	0	1	NTU
Volumes purged	3.3	2.6	well vol
Sampling code			
Synchronous water level	214.8 (09/21/98)	213.7 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.1	J/EV//	NDD			1	GE	0.45	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	2,000	N//				1	GE	1,900	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB111C

## Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<2.3E-01	U//	< 0.5280			1	GP	<4.5E-02	U//	<6.6E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<2.9E-01	U//	< 1.1600			1	GP	<1.9E-01	U//	<1.4E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	4.8E+00	//				1	GP	3.7E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB111D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75382.9 E51515.9	33.276552 °N 81.677577 °W	221.7-201.7 ft msl	276.6 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/08/98 10/23/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	218.2	217.8	ft msl
pH	5.1	5.8	pH
Sp. conductance	38	75	µS/cm
Water temperature	21.9	18.7	°C
Alkalinity as CaCO <sub>3</sub>	0	10	mg/L
Turbidity	1	3	NTU
Volumes purged	4.9	0.19	well vol
Sampling code	XN	XN	
Synchronous water level	218.1 (09/21/98)	217.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	12	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	0.75	//				1	GE								µg/L
Copper, total recoverable	54	N//				1	GE								µg/L
Cyanide	2.1	J/E/	NDD			1	GE								µg/L
Lead, total recoverable	4.3	N//				1	GE	11	//				1	GE	µg/L
Mercury, total recoverable	0.12	J/E/	NDD			1	GE								µg/L
Nickel, total recoverable	<1.2	U//	< 0.20			1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,900	N//				1	GE	3,900	//				3	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	44	N//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<3.7	U//OV/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB111D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<3.7E-02	UI//	< 0.1400			1	GP								pCi/L
Beta dose	0.4750														pCi/L
Cesium-137	<1.1E+00	UI//	< 3.9600			1	GP								pCi/L
Cobalt-60	<1.2E-01	UI//	< 3.9400			1	GP								pCi/L
Curium-242	<0.0E+00	UI//	< 0.0638			1	GP								pCi/L
Curium-243/244	<4.9E-03	UI//	< 0.1070			1	GP								pCi/L
Curium-245/246	<4.9E-03	UI//	< 0.1070			1	GP								pCi/L
Gross alpha	2.6E+00	//				1	GP	2.5E+00	//			1	GE		pCi/L
Iodine-129	<5.0E-01	UI//	< 1.2500			1	GP								pCi/L
Nonvolatile beta	2.8E+00	//				1	GP	4.7E+00	//			1	GE		pCi/L
Plutonium-238	<5.7E-03	UI//	< 0.1820			1	GP								pCi/L
Plutonium-239/240	<2.7E-02	UI//	< 0.1110			1	GP								pCi/L
Radium-226	1.8E+00	//				1	GP								pCi/L
Radium-228	<5.4E-01	UI//	< 0.8290			1	GP								pCi/L
Strontium-90	3.8E+00	//				1	GP								pCi/L
Technetium-99	<9.8E-01	UI//	< 20			1	GP								pCi/L
Thorium-228	<3.9E-01	UI//	< 0.5140			1	GP								pCi/L
Thorium-230	<0.0E+00	UI//	< 0.2170			1	GP								pCi/L
Thorium-232	<1.7E-02	UI//	< 0.3820			1	GP								pCi/L
Sum of alphas															
Sum of betas	3.8E+00														pCi/L
Total radium	1.8E+00														pCi/L
Tritium	2.2E+02	//		■		1	GP	2.8E+02	//		■		1	GE	pCi/mL
Uranium-233/234	<1.1E-01	UI//	< 0.2430			1	GP								pCi/L
Uranium-235	<3.8E-02	UI//	< 0.2020			1	GP								pCi/L
Uranium-238	<6.4E-02	UI//	< 0.2200			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB112A

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74231.4 E48809.1	33.269588 °N 81.682466 °W	91.0-81.0 ft msl	229.1 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/06/98 10/29/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	153.7	153.7	ft msl
pH	6.7	6.5	pH
Sp. conductance	140	160	µS/cm
Water temperature	20.6	19.8	°C
Alkalinity as CaCO <sub>3</sub>	29	53	mg/L
Turbidity	1	1	NTU
Volumes purged	6.0	2.2	well vol
Sampling code			
Synchronous water level	153.8 (09/18/98)	153.5 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	43	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	0.72	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	0.099	J/E/	NDD			1	GE								µg/L
Copper, total recoverable	1.2	N/				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	0.15	J/E/	NDD			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	UJ//1	< 0.20			1	GE								µg/L
Nickel, total recoverable	0.92	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,500	N/				1	GE	3,500	//				2	GE	µg/L
Selenium, total recoverable	0.38	J/E/	NDD			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	7.1	//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<2.8	UJ/VQ8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB112A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<-1.0E-02	U//	< 0.2030	■		1	GP								pCi/L
Beta dose	1.2000														pCi/L
Cesium-137	<1.3E+00	U//	< 4.4000			1	GP								pCi/L
Cobalt-60	<-1.0E+00	U//	< 2.7800			1	GP								pCi/L
Curium-242	<-2.0E-02	U//	< 0.1880			1	GP								pCi/L
Curium-243/244	<-5.0E-02	U//	< 0.2590			1	GP								pCi/L
Curium-245/246	<-6.0E-03	U//	< 0.0751			1	GP								pCi/L
Gross alpha	1.1E+00	//				1	GP	2.2E+00	//			1	GE		pCi/L
Iodine-129	<4.0E-01	U//	< 0.5120			1	GP								pCi/L
Nonvolatile beta	8.9E+00	//				1	GP	1.8E+01	//			1	TM		pCi/L
Plutonium-238	<9.3E-03	U//	< 0.2640			1	GP								pCi/L
Plutonium-239/240	<1.4E-02	U//	< 0.0939			1	GP								pCi/L
Radium-226	1.5E+00	//				1	GP								pCi/L
Radium-228	<1.3E-01	U//	< 0.8800			1	GP								pCi/L
Strontium-90	9.6E+00	//		■		1	GP								pCi/L
Technetium-99	<4.6E+00	U//	< 22.0			1	GP								pCi/L
Thorium-228	<-2.0E-02	U//	< 0.3870			1	GP								pCi/L
Thorium-230	<1.8E-01	U//	< 0.1320			1	GP								pCi/L
Thorium-232	<0.0E+00	U//	< 0.1320			1	GP								pCi/L
Sum of alphas															
Sum of betas	9.6E+00														pCi/L
Total radium	1.5E+00														pCi/L
Tritium	3.8E+01	//		■		1	GP	1.0E+02	//		■	1	GE		pCi/mL
Uranium-233/234	<1.4E-01	U//	< 0.1570			1	GP								pCi/L
Uranium-235	<6.1E-02	U//	< 0.1080			1	GP								pCi/L
Uranium-238	<3.5E-02	U//	< 0.0521			1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB112C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74227.5 E48794.8	33.269556 °N 81.682496 °W	139.1-129.1 ft msl	229.1 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/20/98 10/15/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	193.6	202.1	ft msl
pH	4.2	4.2	pH
Sp. conductance	1400	1300	µS/cm
Water temperature	20.9	19.4	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	2.4	2	NTU
Volumes purged	2.8	2.2	well vol
Sampling code		N	
Synchronous water level	202.7 (09/18/98)	201.4 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<150	U//	<150			50	GE								µg/L
Barium, total recoverable	720	//				1	GE								µg/L
Cadmium, total recoverable	36	//		■		1	GE	36	//		■		1	GE	µg/L
Chromium, total recoverable	<150	U//	<150			50	GE								µg/L
Cobalt, total recoverable	190	//		■		50	GE								µg/L
Copper, total recoverable	27	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	0.86	J/E/	NDD			1	GE	1.4	J//	NDD			1	GE	µg/L
Mercury, total recoverable	0.38	//				1	GE								µg/L
Nickel, total recoverable	93	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	220,000	J/IV/1	NDD			100	GE	230,000	//		■		100	GE	µg/L
Selenium, total recoverable	<250	U//	<250			50	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<0.068	U/V/	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<100	U//	<100.0000			50	GE								µg/L
Zinc, total recoverable	230	//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U/J/Q/	< 10		●	1	GE								µg/L
Dichloromethane	<1.9	U/S/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

WELL FSB112C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<1.5E-01	U//	< 0.1720	■		1	GP								pCi/L
Beta dose	190.1416			■											pCi/L
Cesium-137	<1.6E+00	U//	< 3.3300			1	GP								pCi/L
Cobalt-60	3.6E+00	//				1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.1850			1	GP								pCi/L
Curium-243/244	<1.4E-02	U//	< 0.3030			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.1720			1	GP								pCi/L
Gross alpha	1.6E+02	//		■		1	GP	1.6E+02	//		■		1	GE	pCi/L
Iodine-129	1.2E+02	//		■		1	GP								pCi/L
Nonvolatile beta	1.8E+03	//		■		1	GP	1.9E+03	//		■		1	GE	pCi/L
Plutonium-238	<0.0E+00	U//	< 0.1880			1	GP								pCi/L
Plutonium-239/240	<6.3E-02	U//	< 0.1880			1	GP								pCi/L
Radium-226	1.3E+02	//		■		1	GP								pCi/L
Radium-228	3.0E+01	//		■		1	GP								pCi/L
Strontium-90	5.1E+02	//		■		1	GP								pCi/L
Technetium-99	3.2E+02	//		■		1	GP								pCi/L
Thorium-228	1.1E+00	R/4/	Rej			1	GP								pCi/L
Thorium-230	<7.9E-02	U//	< 0.2360			1	GP								pCi/L
Thorium-232	<0.0E+00	U//	< 0.2360			1	GP								pCi/L
Sum of alphas	7.9E+00			■											pCi/L
Sum of betas	9.8E+02			■											pCi/L
Total radium	1.6E+02			■											pCi/L
Tritium	6.4E+03	//		■		1	GP	7.3E+03	//		■		1	GE	pCi/mL
Uranium-233/234	4.1E+00	//				1	GP								pCi/L
Uranium-235	3.2E-01	//				1	GP								pCi/L
Uranium-238	3.5E+00	//				1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB112D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74223.7 E48780.0	33.269523 °N 81.682527 °W	208.9-188.9 ft msl	229.6 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/20/98	10/14/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	207.9	206.6	ft msl
pH	4	3.7	pH
Sp. conductance	240	180	µS/cm
Water temperature	22.3	18.3	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	3.2	1	NTU
Volumes purged	5.1	4.5	well vol
Sampling code			
Synchronous water level	207.2 (09/18/98)	205.8 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<15	U//	< 15.0			5	GE								µg/L
Barium, total recoverable	310	//				1	GE								µg/L
Cadmium, total recoverable	3.2	//				1	GE	1.9	//				1	GE	µg/L
Chromium, total recoverable	5.5	J/E/	NDD			5	GE								µg/L
Cobalt, total recoverable	9.5	//				5	GE								µg/L
Copper, total recoverable	50	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	1.5	J/E/	NDD			1	GE	1.8	J/IV/	NDD			1	GE	µg/L
Mercury, total recoverable	0.039	J/E/	NDD			1	GE								µg/L
Nickel, total recoverable	14	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	25,000	J/IV/1	NDD			25	GE	16,000	//				10	GE	µg/L
Selenium, total recoverable	7.1	J/E/	NDD			5	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<10	U//	< 10			5	GE								µg/L
Zinc, total recoverable	55	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.8	U/J/Q/	<9.8			1	GE								µg/L
Dichloromethane	<1.4	U/8/	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L



# WELL FSB112D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<7.9E-02	UI//	< 0.2930	■		1	GP								pCi/L
Beta dose	46.7000			■											pCi/L
Cesium-137	<1.0E+00	UI//	< 3.3800			1	GP								pCi/L
Cobalt-60	<8.8E-02	UI//	< 3.5100			1	GP								pCi/L
Curium-242	<1.1E-01	UI//	< 0.3160			1	GP								pCi/L
Curium-243/244	<5.1E-02	UI//	< 0.6090			1	GP								pCi/L
Curium-245/246	<0.0E+00	UI//	< 0.2930			1	GP								pCi/L
Gross alpha	5.0E+01	//		■		1	GP	4.6E+01	//		■		1	GE	pCi/L
Iodine-129	1.2E+01	//				1	GP								pCi/L
Nonvolatile beta	7.1E+02	//		■		1	GP	5.2E+02	//		■		1	GE	pCi/L
Plutonium-238	<1.2E-01	UI//	< 0.1810			1	GP								pCi/L
Plutonium-239/240	<1.1E-01	UI//	< 0.3180			1	GP								pCi/L
Radium-226	3.3E+01	//		■		1	GP								pCi/L
Radium-228	1.1E+01	//		■		1	GP								pCi/L
Strontium-90	2.6E+02	//		■		1	GP								pCi/L
Technetium-99	<8.0E+00	UI//	< 21.7000			1	GP								pCi/L
Thorium-228	6.4E-01	R/4/	Rej			1	GP								pCi/L
Thorium-230	<7.7E-02	UI//	< 0.2320			1	GP								pCi/L
Thorium-232	<0.0E+00	UI//	< 0.2320			1	GP								pCi/L
Sum of alphas	8.9E+00			■											pCi/L
Sum of betas	2.8E+02			■											pCi/L
Total radium	4.4E+01			■											pCi/L
Tritium	6.0E+02	//		■		1	GP	3.7E+02	//		■		1	GE	pCi/mL
Uranium-233/234	5.5E+00	//				1	GP								pCi/L
Uranium-235	<1.8E-01	UI//	< 0.1800			1	GP								pCi/L
Uranium-238	3.5E+00	//				1	GP								pCi/L

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB113A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74167.5 E51068.1	33.273133 °N 81.676395 °W	91.3-81.0 ft msl	223.2 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/07/98 10/23/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	160.8	160.8	ft msl
pH	11.9	11.8	pH
Sp. conductance	1000	2100	µS/cm
Water temperature	19.5	17.7	°C
Alkalinity as CaCO <sub>3</sub>	354	415	mg/L
Turbidity	2	1	NTU
Volumes purged	0.057	0.038	well vol
Sampling code	XN	XN	
Synchronous water level	203.6 (09/17/98)	160.4 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.5	J/EV/	NDD			1	GE	2.9	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	8,600	/V/				5	GE	6,900	//				5	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB113A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.4E+00	//				1	GP	4.3E+00	//				1	GE	pCi/L
Iodine-129															
Nonvolatile beta	7.2E+00	//				1	GP	4.4E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.8E+02	//		■		1	GP	1.9E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB113C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74160.7 E51084.2	33.273144 °N 81.676339 °W	164.0-154.0 ft msl	222.9 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/07/98 10/23/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	203.6	202.8	ft msl
pH	6.9	7.1	pH
Sp. conductance	120	140	µS/cm
Water temperature	23.1	18.1	°C
Alkalinity as CaCO <sub>3</sub>	37	35	mg/L
Turbidity	2	8	NTU
Volumes purged	2.3	0.031	well vol
Sampling code		XN	
Synchronous water level	160.6 (09/17/98)	202.6 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<0.25	U/V//	< 2.0			1	GE	1.0	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	4,500	N//				3	GE	5,100	//				5	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB113C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.0E+00	//				1	GP	<6.3E-01	U//					1	GE pCi/L
Iodine-129															
Nonvolatile beta	1.4E+00	//				1	GP	<1.4E+00	U//					1	GE pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	5.3E+01	//				■	1	GP	6.4E+01	//				■	1 GE pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB113D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74154.8 E51098.4	33.273154 °N 81.676290 °W	209.6-189.6 ft msl	222.5 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/07/98 10/23/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	208.5	207.5	ft msl
pH	5.0	4.2	pH
Sp. conductance	24	26	µS/cm
Water temperature	19.4	17.1	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	3	NTU
Volumes purged	9.0	3.9	well vol
Sampling code			
Synchronous water level	208.1 (09/17/98)	206.1 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.66	J/EV//	NDD			1	GE	0.88	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	660	/V/				1	GE	660	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB113D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<8.9E-01	U//	< 0.9610			1	GP	<8.1E-01	U//	<7.3E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<1.9E-01	U//	< 1.9500			1	GP	<7.5E-01	U//	<1.4E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	6.8E+00	//				1	GP	6.3E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB114A

SRS Coord	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75297.4 E52046.6	33.277229 °N 81.676014 °W	105.0-95.2 ft msl	252 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/01/98 10/26/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	156.2	155.8	ft msl
pH	7.4	7.2	pH
Sp. conductance	190	170	µS/cm
Water temperature	21.3	20.4	°C
Alkalinity as CaCO <sub>3</sub>	60	25	mg/L
Turbidity	1	3	NTU
Volumes purged	3.2	3.4	well vol
Sampling code			
Synchronous water level	156.1 (09/21/98)	155.8 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.13	J/E/	NDD			1	GE	0.63	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	2,100	//				1	GE	2,000	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB114A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	7.9E-01	J/C/	NDD			1	GP	<6.7E-01	U//	<6.2E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	1.7E+00	//				1	GP	<6.6E-01	U//	<1.1E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	8.5E-01	//				1	GP	<4.7E-01	U//	<6.3E-01			1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB114C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75288.5 E52033.8	33.277188 °N 81.676030 °W	168.0-158.0 ft msl	252.2 ft msl	4" PVC	S	Bamwell (IIB <sub>1</sub> )

SAMPLE DATE	07/01/98	10/26/98
-------------	----------	----------

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	215.2	215.2	ft msl
pH	5.7	5.2	pH
Sp. conductance	73	50	µS/cm
Water temperature	21.1	21.5	°C
Alkalinity as CaCO <sub>3</sub>	15	1	mg/L
Turbidity	2	2	NTU
Volumes purged	3.1	2.7	well vol
Sampling code			
Synchronous water level	215.6 (09/21/98)	214.5 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	2.5	//				1	GE	2.2	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	2,100	//				1	GE	2,100	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB114C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.2E+00	J/C/	NDD			1	GP	<5.5E-02	U//	<5.7E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<9.4E-01	U//	< 1.1700			1	GP	<1.1E+00	U//	<1.2E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	3.3E+00	//				1	GP	3.3E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB114D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75278.6 E52018.6	33.277141 °N 81.676051 °W	217.8-197.7 ft msl	252.2 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/01/98 10/26/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	219.2	218.5	ft msl
pH	5.0	4.4	pH
Sp. conductance	36	40	µS/cm
Water temperature	20.4	19.2	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	3.9	4.5	well vol
Sampling code			
Synchronous water level	218.9 (09/21/98)	217.7 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	6.9	//				1	GE	8.2	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,900	//				1	GE	2,000	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB114D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.0E+00	J/C/	NDD					1	GP	<1.4E+00	U//			<6.1E-01	1 GE pCi/L
Iodine-129															
Nonvolatile beta	2.6E+00	//						1	GP	<1.4E+00	U//			<1.1E+00	1 GE pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	5.8E+00	//						1	GP	6.0E+00	//				1 GE pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB115C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72515.5 E49736.0	33.267308 °N 81.676692 °W	173.8-163.8 ft msl	207.8 ft msl	4" PVC	S	Barnwell (11B1)

SAMPLE DATE 07/01/98 10/19/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	184.8	184.4	ft msl
pH	5.5	5.1	pH
Sp. conductance	20	10	µS/cm
Water temperature	19.5	22.2	°C
Alkalinity as CaCO <sub>3</sub>	1	3	mg/L
Turbidity	2	8	NTU
Volumes purged	2.8	0.074	well vol
Sampling code		XN	
Synchronous water level	184.8 (09/21/98)	182.9 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	2.3	//				1	GE	5.4	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	480	//				1	GE	530	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB115C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<1.9E-01	UI//	< 0.5680			1	GP	<3.5E-01	U//	<4.5E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<7.0E-01	UI//	< 1.1600			1	GP	<1.3E+00	U//	<1.1E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	7.7E+00	//				1	GP	8.5E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB115D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72504.3 E49728.3	33.267268 °N 81.676691 °W	192.5-182.5 ft msl	208.5 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/01/98 10/19/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	192.8	191.6	ft msl
pH	5.0	4.3	pH
Sp. conductance	16	12	µS/cm
Water temperature	23.3	21.9	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	106	9	NTU
Volumes purged	0.15	5.7	well vol
Sampling code	XN		
Synchronous water level	191.9 (09/21/98)	191.4 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.65	J/E/	NDD			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	23	//				1	GE	4.8	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	60	//				1	GE	170	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB115D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	7.2E+00	J/C/	NDD												
Iodine-129															
Nonvolatile beta	5.7E+00	//													
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	7.3E+00	//													
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB116C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72725.5 E50645.9	33.269255 °N 81.674705 °W	170.5-160.5 ft msl	202.5 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE	07/01/98	10/21/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	190.5	190.0	ft msl
pH	5.1	4.3	pH
Sp. conductance	20	10	µS/cm
Water temperature	19.5	19.2	°C
Alkalinity as CaCO <sub>3</sub>	1	0	mg/L
Turbidity	1	1	NTU
Volumes purged	4.1	3.7	well vol
Sampling code			
Synchronous water level	177.3 (09/21/98)	189.8 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.81	J/E/	NDD			1	GE	0.83	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	800	//				1	GE	850	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB116C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<-7.0E-02	U//	< 0.6010			1	GP	<4.5E-01	U//	<6.7E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<1.9E-01	U//	< 1.2600			1	GP	<2.5E-01	U//	<1.3E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.0E+01	//				1	GP	1.2E+01	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB116D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72727.4 E50629.7	33.269233 °N 81.674751 °W	196.4-186.4 ft msl	202.9 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/01/98 10/21/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	193.3	192.5	ft msl
pH	5.1	4.5	pH
Sp. conductance	24	14	µS/cm
Water temperature	26.3	19.7	°C
Alkalinity as CaCO <sub>3</sub>	1	1	mg/L
Turbidity	22	26	NTU
Volumes purged	0.22	0.25	well vol
Sampling code	XN	XN	
Synchronous water level	191.0 (09/21/98)	191.3 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.77	J/E/	NDD			1	GE	0.38	J/V	NDD			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	38	//		■		1	GE	29	//		■		1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	90	//				1	GE	170	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB116D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<1.3E+00	UI//	< 1.3900			1	GP	3.4E+00	//				1	GE	pCi/L
Iodine-129															
Nonvolatile beta	3.6E+00	//				1	GP	5.1E+01	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	8.7E+00	//				1	GP	1.1E+01	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

## WELL FSB117D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74070.4 E50486.8	33.271970 °N 81.677736 °W	209.7-189.7 ft msl	230.7 ft msl	4" PVC	S	Water Table (IIB2)

<u>SAMPLE DATE</u>	07/06/98	10/07/98
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### FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	206.4	204.9	ft msl
pH	3.6	3.7	pH
Sp. conductance	420	440	µS/cm
Water temperature	19.9	21.6	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	7	4	NTU
Volumes purged	3.4	4.6	well vol
Sampling code			
Synchronous water level	205.4 (09/17/98)	204.7 (12/18/98)	ft msl

### ANALYTICAL DATA

#### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	3.8	//				1	GE	4.4	//				1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	3.7	//				1	GE	1.3	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	42,000	N/		■		25	GE	54,000	//		■		50	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

#### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB117D (cont.)

## Radioactive Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.7E+02	J/II/1	NDD			1	GP	7.5E+02	//		■		1	GE	pCi/L
Iodine-129															
Nonvolatile beta	6.1E+02	J/IV/1	NDD			1	GP	7.6E+02	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	2.4E+03	//		■		1	GP	2.2E+03	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB118D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74697.9 E51276.3	33.274646 °N 81.676877 °W	211.3-191.3 ft msl	243.3 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/22/98 10/22/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	213.4	212.6	ft msl
pH	5.0	4.1	pH
Sp. conductance	38	30	µS/cm
Water temperature	19.9	18.0	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	3	1	NTU
Volumes purged	2.3	18	well vol
Sampling code			
Synchronous water level	213.1 (09/17/98)	212.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.21	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	9.3	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	8.6	//				1	GE								µg/L
Cobalt, total recoverable	0.74	//				1	GE								µg/L
Copper, total recoverable	50	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	5.3	//				1	GE	2.3	//				1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	9.6	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	900	N//				1	GE	980	//				1	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<0.048	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	31	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.9	U//	< 9.9			1	GE								µg/L
Dichloromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB118D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241	<-2.5E-02	U//	< 0.2080			1	GP								pCi/L
Cesium-137	<-6.9E-01	U//	< 3.2000			1	GP								pCi/L
Cobalt-60	<-1.2E+00	U//	< 3.3200			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.1060			1	GP								pCi/L
Curium-243/244	<0.0E+00	U//	< 0.1000			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.1000			1	GP								pCi/L
Gross alpha	1.2E+00	//				1	GP	<1.6E+00	U//	< 8.7E-01			1	GE	pCi/L
Iodine-129	1.3E+00	R/J4/	Rej			1	GP								pCi/L
Nonvolatile beta	<9.6E-01	U//	< 1.3600			1	GP	<1.7E+00	U//	<1.5E+00			1	GE	pCi/L
Plutonium-238	<-1.7E-03	U//	< 0.1080			1	GP								pCi/L
Plutonium-239/240	<-3.8E-03	U//	< 0.0747			1	GP								pCi/L
Radium-226	2.1E+00	//				1	GP								pCi/L
Radium-228	<2.6E+00	U/V//	< 1.0400			1	GP								pCi/L
Strontium-90	<-4.6E-02	U//	< 1.4000			1	GP								pCi/L
Technetium-99	<-1.4E+01	U//	< 24.4000			1	GP								pCi/L
Thorium-228	<1.6E-01	U//	< 0.2910			1	GP								pCi/L
Thorium-230	<5.8E-02	U//	< 0.1750			1	GP								pCi/L
Thorium-232	<-7.9E-03	U//	< 0.1750			1	GP								pCi/L
Sum of alphas															
Sum of betas															
Total radium	2.1E+00														pCi/L
Tritium	8.2E+00	//				1	GP	6.8E+00	//				1	GE	pCi/mL
Uranium-233/234	<-4.5E-02	U//	< 0.4340			1	GP								pCi/L
Uranium-235	<-1.5E-02	U//	< 0.3310			1	GP								pCi/L
Uranium-238	<-1.3E-01	U//	< 0.1880			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB119D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74599.7 E50600.6	33.273326 °N 81.678465 °W	213.1-193.1 ft msl	254.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/09/98	10/07/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	210.4	209.0	ft msl
pH	3.4		pH
Sp. conductance	880		µS/cm
Water temperature	21.5		°C
Alkalinity as CaCO <sub>3</sub>	0		mg/L
Turbidity	50		NTU
Volumes purged	0.088	1.3	well vol
Sampling code	XN	XN	
Synchronous water level	209.2 (09/17/98)	208.4 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	6.8	//		■		1	GE	5.6	//		■		1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	4.4	//				1	GE	5.1	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	110,000	//		■		50	GE	94,000	//		■		50	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB119D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.2E+03	//		■		1	GP	1.1E+03	//		■		1	GE	pCi/L
Iodine-129															
Nonvolatile beta	1.1E+03	//		■		1	GP	1.2E+03	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	4.3E+03	//		■		1	GP	3.5E+03	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB120A

SRS Coord	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75538.9 E49175.7	33.273077 °N 81.684041 °W	109.0-99.0 ft msl	280.1 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/09/98 10/26/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	175.8	176.4	ft msl
pH	11.8	11.3	pH
Sp. conductance	2000	1400	µS/cm
Water temperature	25.8	21.9	°C
Alkalinity as CaCO <sub>3</sub>	524	253	mg/L
Turbidity	2	3	NTU
Volumes purged	0.020	0.020	well vol
Sampling code	XN	XN	
Synchronous water level	177.5 (09/21/98)	173.3 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	130	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	1.4	//				1	GE	µg/L
Chromium, total recoverable	<3.7	U//	< 3.0			1	GE								µg/L
Cobalt, total recoverable	0.63	//				1	GE								µg/L
Copper, total recoverable	1.2	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	4.6	//				1	GE	2.2	//				1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	3.7	N//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	18,000	N//		■		10	GE	20,000	//		■		25	GE	µg/L
Selenium, total recoverable	1.5	J/E/	NDD			1	GE								µg/L
Silver, total recoverable	<0.18	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	7.4	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.0	U//	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	1.7	//				1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB120A (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<3.0E-04	U//	< 0.1370	■		1	GP								pCi/L
Beta dose	5.0000														pCi/L
Cesium-137	<2.9E-01	U//	< 2.8800			1	GP								pCi/L
Cobalt-60	<2.1E-02	U//	< 2.7200			1	GP								pCi/L
Curium-242	<7.5E-03	U//	< 0.1460			1	GP								pCi/L
Curium-243/244	<7.7E-03	U//	< 0.0996			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0480			1	GP								pCi/L
Gross alpha	6.6E+00	//				1	GP	<8.0E+00	U//	<4.0E+00			1	GE	pCi/L
Iodine-129	5.0E+00	//				1	GP								pCi/L
Nonvolatile beta	5.4E+01	//		■		1	GP	3.9E+01	//				1	GE	pCi/L
Plutonium-238	<3.9E-03	U//	< 0.0846			1	GP								pCi/L
Plutonium-239/240	<0.0E+00	U//	< 0.0480			1	GP								pCi/L
Radium-226	3.1E+00	//				1	GP								pCi/L
Radium-228	<2.2E-01	U//	< 1.1900			1	GP								pCi/L
Strontium-90	7.9E+00	J/L	NDD			1	GP								pCi/L
Technetium-99	<1.6E+01	U//	< 24.8000			1	GP								pCi/L
Thorium-228	<1.5E-01	U//	< 0.3700			1	GP								pCi/L
Thorium-230	<1.5E-01	U//	< 0.1840			1	GP								pCi/L
Thorium-232	<0.0E+00	U//	< 0.0945			1	GP								pCi/L
Sum of alphas	6.8E-01														pCi/L
Sum of betas	1.3E+01														pCi/L
Total radium	3.1E+00														pCi/L
Tritium	4.2E+02	//		■		1	GP	5.4E+02	//		■		1	GE	pCi/mL
Uranium-233/234	5.2E-01	//				1	GP								pCi/L
Uranium-235	1.6E-01	//				1	GP								pCi/L
Uranium-238	<1.1E-01	U//	< 0.1230			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB120C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75549.8 E49171.1	33.273094 °N 81.684074 °W	160.7-150.7 ft msl	279.7 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/21/98 10/26/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	208.5	207.2	ft msl
pH	6.3	6.1	pH
Sp. conductance	260	250	µS/cm
Water temperature	21.7	20.3	°C
Alkalinity as CaCO <sub>3</sub>	10	40	mg/L
Turbidity	1	1	NTU
Volumes purged	7.3	3.5	well vol
Sampling code			
Synchronous water level	207.5 (09/21/98)	206.5 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	81	//				1	GE								µg/L
Cadmium, total recoverable	0.45	J/E/	NDD			1	GE	0.39	J//	NDD			1	GE	µg/L
Chromium, total recoverable	0.99	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	4.8	//		■		1	GE								µg/L
Copper, total recoverable	1.2	//				1	GE								µg/L
Cyanide	2.4	J/E/	NDD			1	GE								µg/L
Lead, total recoverable	<2.0	U//	< 2.0			1	GE	<2.0	U//	<2.0			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	5.6	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	30,000	N//		■		25	GE	28,000	//		■		50	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	0.053	J/E/	NDD			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	18	//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<2.1	UJ/VO8/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.4	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB120C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	1.4E-01	//				1	GP								pCi/L
Beta dose	0.9392														
Cesium-137	<1.7E+00	UI//	< 2.9300			1	GP								pCi/L
Cobalt-60	<7.9E-01	UI//	< 2.9400			1	GP								pCi/L
Curium-242	<0.0E+00	UI//	< 0.0849			1	GP								pCi/L
Curium-243/244	2.9E-01	//				1	GP								pCi/L
Curium-245/246	<0.0E+00	UI//	< 0.0745			1	GP								pCi/L
Gross alpha	1.0E+01	//				1	GP	5.3E+00	//			1	GE		pCi/L
Iodine-129	<6.1E-01	UI//	< 0.5330			1	GP								pCi/L
Nonvolatile beta	2.7E+01	//				1	GP	3.3E+01	//			1	GE		pCi/L
Plutonium-238	<-2.1E-02	UI//	< 0.1270			1	GP								pCi/L
Plutonium-239/240	<-7.1E-03	UI//	< 0.0917			1	GP								pCi/L
Radium-226	5.0E+00	//		■		1	GP								pCi/L
Radium-228	1.6E+00	//				1	GP								pCi/L
Strontium-90	4.5E+00	//				1	GP								pCi/L
Technetium-99	5.1E+01	//		■		1	GP								pCi/L
Thorium-228	1.7E-01	//				1	GP								pCi/L
Thorium-230	<3.4E-02	UI//	< 0.1400			1	GP								pCi/L
Thorium-232	<2.3E-02	UI//	< 0.0677			1	GP								pCi/L
Sum of alphas	6.1E-01														pCi/L
Sum of betas	5.7E+01			■											pCi/L
Total radium	6.6E+00			■											pCi/L
Tritium	7.2E+02	//		■		1	GP	6.8E+02	//			■	1	GE	pCi/mL
Uranium-233/234	<3.2E-02	UI//	< 0.2340			1	GP								pCi/L
Uranium-235	<5.5E-02	UI//	< 0.1640			1	GP								pCi/L
Uranium-238	<8.6E-02	UI//	< 0.1640			1	GP								pCi/L

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB120D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75568.7 E49163.7	33.273124 °N 81.684130 °W	216.5-196.5 ft msl	280.5 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/22/98 10/26/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	212.5	211.6	ft msl
pH	7.0	6.2	pH
Sp. conductance	90	70	µS/cm
Water temperature	22.7	26.2	°C
Alkalinity as CaCO <sub>3</sub>	34	30	mg/L
Turbidity	16	7	NTU
Volumes purged	0.095	0.10	well vol
Sampling code	XN	XN	
Synchronous water level	212.0 (09/21/98)	211.0 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	47	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	3.3	//				1	GE								µg/L
Cobalt, total recoverable	0.051	J/E/	NDD			1	GE								µg/L
Copper, total recoverable	5.9	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	5.2	//				1	GE	3.2	//				1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	5.2	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	240	N//				1	GE	110	//				1	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	49	//				1	GE								µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<11	U//	< 11			1	GE								µg/L
Dichloromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	UJ/O/1	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	UJ/O/1	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSB120D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<5.8E-02	U//	< 0.1420			1	GP								pCi/L
Cesium-137	<9.6E-01	U//	< 3.3300			1	GP								pCi/L
Cobalt-60	<3.0E-01	U//	< 4.2400			1	GP								pCi/L
Curium-242	<0.0E+00	U//	< 0.0645			1	GP								pCi/L
Curium-243/244	<2.1E-02	U//	< 0.0614			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0613			1	GP								pCi/L
Gross alpha	1.9E+00	//				1	GP	<9.8E-01	U//	<7.7E-01			1	GE	pCi/L
Iodine-129	<3.2E-01	U//	< 1.1400			1	GP								pCi/L
Nonvolatile beta	3.0E+00	//				1	GP	<3.9E-01	U//	<1.4E+00			1	GE	pCi/L
Plutonium-238	<2.1E-03	U//	< 0.6460			1	GP								pCi/L
Plutonium-239/240	<2.3E-02	U//	< 0.5930			1	GP								pCi/L
Radium-226	9.3E-01	//				1	GP								pCi/L
Radium-228	<9.7E-01	U//	< 0.9580			1	GP								pCi/L
Strontium-90	<8.1E-01	U//	< 1.2400			1	GP								pCi/L
Technetium-99	<9.3E+00	U//	< 23.4000			1	GP								pCi/L
Thorium-228	<1.1E-01	U//	< 0.2720			1	GP								pCi/L
Thorium-230	<9.3E-02	U//	< 0.0926			1	GP								pCi/L
Thorium-232	<2.4E-02	U//	< 0.1630			1	GP								pCi/L
Sum of alphas															
Sum of betas															
Total radium	9.3E-01														pCi/L
Tritium	7.9E+00	//				1	GP	4.1E+01	//				1	GE	pCi/mL
Uranium-233/234	<4.1E-02	U//	< 0.2880			1	GP								pCi/L
Uranium-235	<1.3E-02	U//	< 0.2890			1	GP								pCi/L
Uranium-238	<1.6E-01	U//	< 0.1640			1	GP								pCi/L

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB121C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75155.7 E48413.1	33.270985 °N 81.685304 °W	158.4-148.4 ft msl	256.5 ft msl	4" PVC	S	Barnwell (IB1)

SAMPLE DATE	07/02/98	10/22/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	207.0	205.6	ft msl
pH	5.4	5.2	pH
Sp. conductance	68	60	µS/cm
Water temperature	19.8	18.9	°C
Alkalinity as CaCO <sub>3</sub>	5	8	mg/L
Turbidity	1	2	NTU
Volumes purged	5.6	2.5	well vol
Sampling code			
Synchronous water level	206.0 (09/21/98)	204.9 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.15	J/E/	NDD			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.69	J/E/	NDD			1	GE	0.86	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	3,500	/V/				2	GE	17,000	//				10	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB121C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.4E+00	//				1	GP	<1.8E+00	U//	<9.5E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	2.8E+00	//				1	GP	<2.6E+00	U//	<1.6E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	<2.9E-01	U//	<5.8E-01			1	GP	1.3E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB121DR

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75151.9 E48429.7	33.271004 °N 81.685253 °W	211.3-191.3 ft msl	255.5 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/02/98 10/22/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	210.1	208.9	ft msl
pH	5.0	5.3	pH
Sp. conductance	34	50	µS/cm
Water temperature	18.8	17.5	°C
Alkalinity as CaCO <sub>3</sub>	2	9	mg/L
Turbidity	3	4	NTU
Volumes purged	0.081	0.087	well vol
Sampling code	XN	XN	
Synchronous water level	209.3 (09/21/98)	208.3 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.37	J/E/	NDD			1	GE	0.24	J//	NDD			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	38	//		■		1	GE	11	//				1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	3,000	/V/				2	GE	1,200	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB121DR (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	7.6E+00	//				1	GP	9.0E+00	//				1	GE	pCi/L
Iodine-129															
Nonvolatile beta	4.1E+01	//				1	GP	3.4E+01	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	5.6E+01	//		■		1	GP	1.5E+01	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB122C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N73881.8 E48195.0	33.267812 °N 81.683403 °W	170.0-160.0 ft msl	218 ft msl	4" PVC	S	Barnwell (IIB <sub>1</sub> )

SAMPLE DATE 07/27/98 10/22/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	211.1	200.2	ft msl
pH	21.5	4.0	pH
Sp. conductance	4	540	µS/cm
Water temperature	560	18.7	°C
Alkalinity as CaCO <sub>3</sub>	116	0	mg/L
Turbidity	1	1	NTU
Volumes purged	0.030	4.3	well vol
Sampling code	0		
Synchronous water level	200.8 (09/18/98)	199.6 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	1.5	//				1	GE	1.2	//				1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.1	J/E/	NDD			1	GE	0.80	J/I/	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	66,000	I/V/		■		50	GE	62,000	//		■		25	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB122C (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.9E+01	//		■		1	GP	<7.6E+00	U//					1	GE pCi/L
Iodine-129															
Nonvolatile beta	6.6E+01	//		■		1	GP	6.8E+01	J/K/I					1	GE pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.6E+03	//		■		1	GP	1.7E+03	//					1	GE pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB122D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N73865.5 E48201.7	33.267787 °N 81.683354 °W	206.6-186.6 ft msl	217.6 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 07/07/98 10/22/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	192.4	203.9	ft msl
pH	5.0	4.5	pH
Sp. conductance	120	180	µS/cm
Water temperature	18.2	18.8	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	2	4	NTU
Volumes purged	53	10	well vol
Sampling code			
Synchronous water level	204.8 (09/18/98)	203.2 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Arsenic, total recoverable	<3.0	U//	< 3.0			1	GE								µg/L
Barium, total recoverable	60	//				1	GE								µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable	0.68	J/E/	NDD			1	GE								µg/L
Cobalt, total recoverable	1.8	//				1	GE								µg/L
Copper, total recoverable	6.3	//				1	GE								µg/L
Cyanide	<10	U//	< 10			1	GE								µg/L
Lead, total recoverable	3.0	N/				1	GE	2.6	//				1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE								µg/L
Nickel, total recoverable	2.9	//				1	GE								µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	13,000	N/		■		25	GE	3,000	//				3	GE	µg/L
Selenium, total recoverable	<5.0	U//	< 5.0			1	GE								µg/L
Silver, total recoverable	<1.0	U//	< 1.0			1	GE								µg/L
Thallium, total recoverable	<2.5	U//	< 2.5			1	GE								µg/L
Vanadium, total recoverable	<2.0	U//	< 2.0			1	GE								µg/L
Zinc, total recoverable	34	//				1	GE								µg/L

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene	<1.0	U//	< 1.0			1	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	U//	< 10			1	GE								µg/L
Dichloromethane	<1.0	U//	< 1.0			1	GE								µg/L
Phenols	<5.0	U//	< 5.0			1	GE								µg/L
Tetrachloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichloroethylene	<1.0	U//	< 1.0			1	GE								µg/L
Trichlorofluoromethane	<1.0	U//	< 1.0			1	GE								µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



WELL FSB122D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241	<3.0E-02	U//	< 0.1590			1	GP								pCi/L
Beta dose	0.4706														pCi/L
Cesium-137	<1.2E+00	U//	< 4.6400			1	GP								pCi/L
Cobalt-60	<2.3E-01	U//	< 5.0100			1	GP								pCi/L
Curium-242	<2.0E-02	U//	< 0.1880			1	GP								pCi/L
Curium-243/244	<7.7E-02	U//	< 0.0768			1	GP								pCi/L
Curium-245/246	<0.0E+00	U//	< 0.0767			1	GP								pCi/L
Gross alpha	4.5E+00	//				1	GP	2.7E+00	//				1	GE	pCi/L
Iodine-129	<6.6E-01	U//	< 0.6740			1	GP								pCi/L
Nonvolatile beta	1.4E+01	//				1	GP	1.7E+01	//				1	GE	pCi/L
Plutonium-238	<2.3E-02	U//	< 0.2480			1	GP								pCi/L
Plutonium-239/240	<2.9E-02	U//	< 0.1170			1	GP								pCi/L
Radium-226	<1.2E+00	U//	< 0.5260			1	GP								pCi/L
Radium-228	<5.0E-01	U//	< 0.8300			1	GP								pCi/L
Strontium-90	3.4E+00	//				1	GP								pCi/L
Technetium-99	4.1E+01	//				1	GP								pCi/L
Thorium-228	<1.5E-01	U//	< 0.5260			1	GP								pCi/L
Thorium-230	<6.3E-02	U//	< 0.1890			1	GP								pCi/L
Thorium-232	<3.3E-02	U//	< 0.3380			1	GP								pCi/L
Sum of alphas															
Sum of betas	4.5E+01														
Tritium	3.5E+02	//		■		1	GP	4.3E+02	//		■		1	GE	pCi/L
Uranium-233/234	<1.9E-01	U//	< 0.0566			1	GP								pCi/mL
Uranium-235	<6.2E-02	U//	< 0.1320			1	GP								pCi/L
Uranium-238	<6.7E-02	U//	< 0.1170			1	GP								pCi/L

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB123C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74566.7 E51750.5	33.275129 °N 81.675374 °W	165.3-155.3 ft msl	238.1 ft msl	4" PVC	S	Barnwell (IB <sub>1</sub> )

SAMPLE DATE 07/07/98 10/21/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	211.7	211.5	ft msl
pH	5.8	5.4	pH
Sp. conductance	60	48	µS/cm
Water temperature	21.2	19.1	°C
Alkalinity as CaCO <sub>3</sub>	8	7	mg/L
Turbidity	1	1	NTU
Volumes purged	4.7	3.6	well vol
Sampling code			
Synchronous water level	211.8 (09/17/98)	210.8 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<0.37	U/V/	< 2.0			1	GE	<2.0	U//	< 2.0			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	3,000	N//				3	GE	3,000	//				2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB123C (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	8.2E+00	//				1	GP	<1.8E-01	U//	<7.4E-01			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	<9.5E-01	U//	< 1.7900			1	GP	<1.3E+00	U//	< 1.6E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	2.2E+00	//				1	GP	2.4E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB123D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N74562.7 E51734.8	33.275095 °N 81.675407 °W	214.1-194.1 ft msl	238.1 ft msl	4" PVC	S	Water Table (IIB <sub>2</sub> )

SAMPLE DATE 07/07/98 10/21/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	213.4	212.6	ft msl
pH	5.0	4.2	pH
Sp. conductance	34	36	µS/cm
Water temperature	19.4	18.7	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	21	5.8	well vol
Sampling code			
Synchronous water level	213.3 (09/17/98)	212.0 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<1.0			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.2	J/EV//	NDD			1	GE	1.5	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,600	N//				1	GE	2,200	//				2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSB123D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt	ST	H	DF	Lab	4Q98	Mod	Filt	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	2.1E+00	//													
Iodine-129															
Nonvolatile beta	<1.0E+00	U//	< 1.7200												
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	6.9E+00	//													
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 1D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N79063.1 E52992.5	33.287100 °N 81.680840 °W	228.6-208.5 ft msl	310.8 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/09/98 12/30/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	225.0	224.9	ft msl
pH	4.7	4.4	pH
Sp. conductance	72	180	µS/cm
Water temperature	23.2	15.3	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	13	25	NTU
Volumes purged	0.37	0.37	well vol
Sampling code	XN	XN	
Synchronous water level	225.2 (09/21/98)	( )	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.77	J/E/	NDD			1	GE	1.4	//				1	GE	µg/L
Chromium, total recoverable								5.1	//				1	GE	µg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	16	//		■		1	GE	20	//		■		1	GE	µg/L
Mercury, total recoverable								0.16	//				1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	6,800	N/I				5	GE	12,000	//		■		5	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene								1.0	//				1	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene								1.0	//				1	GE	µg/L
Trichloroethylene								2.8	//				1	GE	µg/L
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 1D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	8.9E+00	//				1	GP	8.6E+00	//				1	GP	pCi/L
Iodine-129															
Nonvolatile beta	8.7E+00	//				1	GP	1.2E+01	//				1	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.4E+02	//		■		1	GP	2.0E+02	//		■		1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

## WELL FSL 2D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N78636.5 E52790.6	33.285827 °N 81.680542 °W	228.8-208.7 ft msl	305.8 ft msl	2" PVC	V	Water Table (ItB2)

<u>SAMPLE DATE</u>	07/20/98	10/29/98
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### FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	225.4	225.8	ft msl
pH	5.8	5.7	pH
Sp. conductance	69	100	µS/cm
Water temperature	23.9	20.3	°C
Alkalinity as CaCO <sub>3</sub>	14	10	mg/L
Turbidity	11	3	NTU
Volumes purged	6.9	0.36	well vol
Sampling code		XN	
Synchronous water level	225.7 (09/21/98)	225.8 (12/21/98)	ft msl

### ANALYTICAL DATA

#### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.14	J/E/	NDD			1	GE	<1.0	U//	<			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	4.5	//				1	GE	2.6	//				1	GE	µg/L
Mercury, total recoverable								0.20	//				1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	1,400	/N/				1	GE	1,100	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

#### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



## WELL FSL 2D

### Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.7E+00	//				1	GP	<1.7E+00	U//	<			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	1.7E+00	//				1	GP	4.4E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	8.9E+00	//				1	GP	8.8E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 3D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N77765.2 E52465.2	33.283369 °N 81.679706 °W	226.0-205.9 ft msl	302 ft msl	2" PVC	V	Water Table (IIB <sub>2</sub> )

SAMPLE DATE	07/20/98	10/28/98
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## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	223.0	223.8	ft msl
pH	6.5	6.9	pH
Sp. conductance	140	120	µS/cm
Water temperature	25.7	27.0	°C
Alkalinity as CaCO <sub>3</sub>	12	28	mg/L
Turbidity	2	5	NTU
Volumes purged	2.5	5.8	well vol
Sampling code			
Synchronous water level	223.6 (09/21/98)	223.8 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	2.0	J/E/	NDD			1	GE	0.51	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	2,000	N//				1	GE	2,200	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene								1.0	//				1	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene								1.0	//				1	GE	µg/L
Trichloroethylene								1.5	//				1	GE	µg/L
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 3D

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.5E+00	//				1	GP	<9.6E-01	U//	<			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	3.1E+00	//				1	GP	2.7E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	3.6E+01	//		■		1	GP	3.3E+01	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N77452.4 E52230.4	33.282294 °N 81.679717 °W	224.1-204.0 ft msl	294.1 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/14/98 10/29/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	218.4	218.8	ft msl
pH	5.5	4.8	pH
Sp. conductance	68	49	µS/cm
Water temperature	26.8	22.3	°C
Alkalinity as CaCO <sub>3</sub>	8	5	mg/L
Turbidity	1	5	NTU
Volumes purged	3.0	0.41	well vol
Sampling code		XN	
Synchronous water level	218.9 (09/21/98)	218.4 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.17	J/E/	NDD			1	GE	<1.0	U//	<			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	43	//		■		1	GE	40	//		■		1	GE	µg/L
Mercury, total recoverable								0.20	//				1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	2,000	//				1	GE	2,200	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 4D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	<2.5E-01	UI//	< 0.7310			1	GP	1.7E+00	//				1	GE	pCi/L
Iodine-129															
Nonvolatile beta	2.9E+00	//				1	GP	5.0E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	4.9E+00	//				1	GP	7.0E+00	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

## WELL FSL 5D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N77047.7 E51903.3	33.280865 °N 81.679791 °W	223.7-203.5 ft msl	291.8 ft msl	2" PVC	V	Water Table (11B2)

SAMPLE DATE 07/14/98 10/15/98

### FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	221.8	222.3	ft msl
pH	4.9	5.2	pH
Sp. conductance	240	170	µS/cm
Water temperature	25.1	22.5	°C
Alkalinity as CaCO <sub>3</sub>	0	8	mg/L
Turbidity	1	1	NTU
Volumes purged	10	6.6	well vol
Sampling code			
Synchronous water level	222.3 (09/21/98)	222.2 (12/21/98)	ft msl

### ANALYTICAL DATA

#### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.45	J/E/	NDD			1	GE	0.21	J/TV/	NDD			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	2.2	//				1	GE	0.75	J/TV/	NDD			1	GE	µg/L
Mercury, total recoverable								0.20	//				1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	23,000	//		■		15	GE	19,000	//		■		10	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

#### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 5D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.3E+01	//				1	GP	1.4E+01	//				1	GE	pCi/L
Iodine-129															
Nonvolatile beta	3.4E+02	//		■		1	GP	1.9E+02	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	3.3E+02	//		■		1	GP	1.8E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 6D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N76733.1 E51727.9	33.279883 °N 81.679642 °W	222.1-202.1 ft msl	286.2 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/14/98 10/28/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	221.3	221.8	ft msl
pH	5.0	4.4	pH
Sp. conductance	170	120	µS/cm
Water temperature	23.5	23.1	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	11	4.0	well vol
Sampling code			
Synchronous water level	221.8 (09/21/98)	221.4 (12/21/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	13	//				1	GE	0.44	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	2,100	//				1	GE	2,800	//				1	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL FSL 6D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	2.1E+00	//				1	GP	<1.5E+00	U//	<			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	9.6E+00	//				1	GP	6.6E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	7.5E+01	//		■		1	GP	6.1E+01	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 7D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N76327.8 E51485.6	33.278592 °N 81.679492 °W	219.6-199.5 ft msl	287.6 ft msl	2" PVC	V	Water Table (IIB <sub>2</sub> )

SAMPLE DATE 07/13/98 10/28/98

## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	216.8	220.8	ft msl
pH	4.0	3.9	pH
Sp. conductance	370	398	µS/cm
Water temperature	21.8	22.3	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	7	1	NTU
Volumes purged	0.0	3.7	well vol
Sampling code	XN		
Synchronous water level	220.9 (09/17/98)	220.1 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	6.9	//		■		1	GE	9.3	//		■		1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	1.7	J/EV/	NDD			1	GE	0.44	J//	NDD			1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	44,000	//		■		25	GE	46,000	//		■		25	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 7D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	5.7E+01	//		■		1	GP	4.6E+01	//		■		1	GE	pCi/L
Iodine-129															
Nonvolatile beta	3.4E+02	//		■		1	GP	7.3E+02	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	8.9E+01	//		■		1	GP	1.5E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 8D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N76054.7 E51513.5	33.278033 °N 81.678888 °W	222.8-202.7 ft msl	290.8 ft msl	2" PVC	V	Water Table (IB <sub>2</sub> )

SAMPLE DATE 07/14/98 10/28/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	220.0	220.0	ft msl
pH	4.8	4.4	pH
Sp. conductance	82	92	µS/cm
Water temperature	23.1	22.0	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	9	1	NTU
Volumes purged	12	3.9	well vol
Sampling code			
Synchronous water level	220.2 (09/17/98)	219.3 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	15	//				1	GE	2.4	//				1	GE	µg/L
Mercury, total recoverable								0.25	//				1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	5,800	//				3	GE	7,300	//				5	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene								1.0	//				1	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene								1.0	//				1	GE	µg/L
Trichloroethylene								1.0	//				1	GE	µg/L
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 8D (cont.)

Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	4.4E+00	//				1	GP	<2.4E+00	U//	<			1	GE	pCi/L
Iodine-129															
Nonvolatile beta	4.3E+00	//				1	GP	8.1E+00	//				1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	1.8E+01	//				1	GP	2.7E+01	//				1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 9D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75768.4 E51543.9	33.277450 °N 81.678252 °W	221.5-201.4 ft msl	285.9 ft msl	2" PVC	V	Water Table (IIB <sub>2</sub> )

SAMPLE DATE	07/14/98	10/28/98
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## FIELD DATA

Constituents	3Q98	4Q98	Unit
Water elevation	219.1	219.0	ft msl
pH	4.1	4.1	pH
Sp. conductance	160	220	µS/cm
Water temperature	21.5	22.5	°C
Alkalinity as CaCO <sub>3</sub>	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	12	4.5	well vol
Sampling code			
Synchronous water level	219.2 (09/17/98)	218.1 (12/18/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	0.35	J/E/	NDD			1	GE	0.44	J//	NDD			1	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	0.87	J/E/	NDD			1	GE	0.56	J//	NDD			1	GE	µg/L
Mercury, total recoverable								1.4	//				1	GE	µg/L
Nickel, total recoverable															
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	17,000	//		■		10	GE	21,000	//		■		25	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

### Organic Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL FSL 9D (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	7.1E+01	//		■		1	GP	1.1E+02	//		■		1	GE	pCi/L
Iodine-129															
Nonvolatile beta	1.1E+02	//		■		1	GP	1.9E+02	//		■		1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas															
Tritium	3.8E+02	//		■		1	GP	6.1E+02	//		■		1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

# WELL HSB 85A

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N73791.9 E58943.4	33.285152 °N 81.654930 °W	71.1-61.1 ft msl	294.4 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE 07/08/98 11/12/98

## FIELD DATA

<u>Constituents</u>	<u>3Q98</u>	<u>4Q98</u>	<u>Unit</u>
Water elevation	169.5	169.3	ft msl
pH	7.1	6.9	pH
Sp. conductance	160	180	µS/cm
Water temperature	20.9	19.5	°C
Alkalinity as CaCO <sub>3</sub>	64	78	mg/L
Turbidity	0	1	NTU
Volumes purged	2.9	2.8	well vol
Sampling code			
Synchronous water level	169.5 (09/17/98)	169.2 (12/22/98)	ft msl

## ANALYTICAL DATA

### Inorganic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<1.0	U//	< 1.0			5	GE	<27	U//	<			1	WA	µg/L
Arsenic, total recoverable								<40	U//	<			1	WA	µg/L
Barium, total recoverable								29	//				1	WA	µg/L
Cadmium, total recoverable	<1.0	U//	< 1.0			1	GE	<1.0	U//	<			1	GE	µg/L
Chromium, total recoverable								<7.0	U//	<			1	WA	µg/L
Cobalt, total recoverable	0.64	J/E/	NDD			5	GE								µg/L
Copper, total recoverable	5.8	/N/				5	GE	3.3	J//	NDD			1	WA	µg/L
Cyanide															
Lead, total recoverable	4.0	J/EV/	NDD			5	GE	0.81	J//	NDD			1	GE	µg/L
Mercury, total recoverable	<0.20	U//	< 0.20			1	GE	1.2	//				1	GE	µg/L
Nickel, total recoverable	<2.1	U/V/	< 1.0			5	GE	<26	U//	<			1	WA	µg/L
Nitrate as nitrogen															
Nitrate-nitrite as nitrogen	22	//				1	WA	<20	U/V/	<			1	GE	µg/L
Selenium, total recoverable								<66	U//	<			1	WA	µg/L
Silver, total recoverable								<5.0	U//	<			1	WA	µg/L
Thallium, total recoverable	<13	U//	< 12.5			5	GE								µg/L
Vanadium, total recoverable	13	/N/				5	GE								µg/L
Zinc, total recoverable	12	J/EV/	NDD			5	GE	<53	U//	<			1	WA	µg/L

### Organic Constituents

<u>Constituents</u>	<u>3Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>4Q98</u>	<u>Mod</u>	<u>Filt.</u>	<u>ST</u>	<u>H</u>	<u>DF</u>	<u>Lab</u>	<u>Unit</u>
Benzene								<5.0	U//	<			1	WA	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<5.0	U//	<			1	WA	µg/L
Phenols								<37	U//	<			1	WA	µg/L
Tetrachloroethylene								<5.0	U//	<			1	WA	µg/L
Trichloroethylene								<5.0	U//	<			1	WA	µg/L
Trichlorofluoromethane								<5.0	U//	<			1	WA	µg/L

#### Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)



# WELL HSB 85A (cont.)

## Radioactive Constituents

Constituents	3Q98	Mod	Filt.	ST	H	DF	Lab	4Q98	Mod	Filt.	ST	H	DF	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.9E+00	//				1	TM	1.3E+00	J//	NDD			1	TM	pCi/L
Iodine-129															
Nonvolatile beta	2.5E+00	//				1	TM	<1.2E+00	U//	<1.1E+00			1	GE	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								<1.5E-01	U//	<8.8E-01			1	TM	pCi/L
Radium-226															
Radium-228															
Strontium-90								1.9E+00	J//	NDD			1	TM	pCi/L
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Sum of alphas															
Sum of betas								1.9E+00							pCi/L
Tritium	<1.2E-01	U//	<1.3E+00			1	TM	<3.4E-02	U//	<6.4E-01			1	GE	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															

## Notes:

- = exceeded holding time
- = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

## F-Area WTU UIC Sample Results: 7/98-12/98

WSRC-TR-99-00012  
Unclassified

UIC Permitted Constituents	Unit	Reg Limit	Jul-98 Result	Aug-98 Result	Sep-98 Result	Oct-98 Result	Nov-98 Result	Dec-98 Result
<b>Section I, INORGANICS</b>								
Arsenic	µg/L	50	<3	<3	<3	<3	<3	<3
Barium	µg/L	2000	15.70	13.90	9.49	16.30	<0.2	25.30
Cadmium	µg/L	5	<1	<1	<1	<1	<1	<1
Chromium	µg/L	100	<3	<3	<3	<3	<3	<3
Lead	µg/L	50	<2	<2	<2	<2	<2	<2
Mercury	µg/L	2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Selenium	µg/L	50	<5	<5	<5	<5	<5	<5
Silver	µg/L	50	<1	<1	<1	<1	<1	<1
<b>Section II, ORGANICS</b>								
Antimony	µg/L	6	<0.2	<0.2	<0.2	0.23	<0.2	<0.2
Cobalt	µg/L	140	7.46	2.37	1.81	1.33	<0.2	3.53
Copper	µg/L	1300	1.85	2.10	5.31	2.85	<0.2	4.87
Cyanide	µg/L	200000	<10	<10	<10	<10	<10	<10
Benzene	µg/L	5	<1	<1	<1	<1	<1	<1
BEHP	µg/L	140	<10.3	<9.9	<10.8	<10	<10	<10.4
Methylene Chloride	µg/L	5	<1	<1	<5	<5	<5	<5
Nickel	µg/L	100	3.84	0.99	0.94	<0.2	<0.2	1.43
Phenol	µg/L	10	<5	<5	<5	<5	<5	<5
Tetrachloroethylene	µg/L	5	<1	<1	<1	<1	<1	<1
Thallium	µg/L	2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
Tin	µg/L	50	NA	NA	NA	NA	NA	NA
Trichloroethylene	µg/L	5	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	µg/L	100	<1	<1	<5	<5	<5	<5
Vanadium	µg/L	49	<2	<2	<2	<2	<2	<2
Zinc	µg/L	5000	<5	<5	<5	<5	<5	<5
<b>Section III, RADIONUCLIDES</b>								
Gross Alpha	pCi/L	15	3.10	4.23	6.22	<12.13	18.60	<16.15
Gross Beta	pCi/L	50	9.73	9.36	16.20	40.40	41.60	<16.29
Total Radium (226+228)	pCi/L	5	2.85	1.69	0.84	BDL	BDL	BDL
<b>Section IV, RADIONUCLIDES</b>								
Americium-241	pCi/L	SOA	0.55	<0.668	<0.569	<0.46	3.54	<1
Cesium-137	pCi/L	SOB	<4.05	<3.78	<3.97	<7.51	<7.62	<7.67
Curium-242	pCi/L	SOA	<0.3	<0.792	<0.517	<0.1874	<0.287	<0.198
Curium-243/244	pCi/L	SOA	<0.339	R	<1	<0.429	<0.865	<0.832
Curium-246	pCi/L	SOA	<0.0994	<0.516	<0.127	<0.2092	<0.3343	<0.191
Carbon-14	pCi/L	SOB	<16.6	<16.8	48.80	60.10	<20.35	25.40
Cobalt-60	pCi/L	SOB	<3.59	<2.47	<4.07	<7.17	<7.36	<8.27
Iodine-129	pCi/L	SOB	46.60	64.30	58.20	22.80	97.50	32.40
Plutonium-238	pCi/L	SOA	<0.305	R	R	<0.1508	<0.456	<0.626
Plutonium-239/240	pCi/L	SOA	<0.199	R	<0.526	<0.1491	<0.1882	<0.441
Nickel-63	pCi/L	SOB	NA	NA	NA	NA	NA	NA
Radium-226	pCi/L	SOR	1.14	1.69	0.84	<1.609	<1.946	<1.412
Radium-228	pCi/L	SOR	1.71	<1.81	<2.11	<4.024	<4.97	<2.398
Strontium-90	pCi/L	SOB	14.90	9.59	9.30	<5.07	<5.73	5.09
Technetium-99	pCi/L	SOB	11.30	25.60	25.40	R	<42.1	27.60
Thorium-228	pCi/L	SOA	<0.212	<1.12	0.25	<0.511	<0.503	<0.661
Thorium-230	pCi/L	SOA	R	<0.43	<0.087	<0.355	<0.377	<0.518
Thorium-232	pCi/L	SOA	<0.254	<0.365	<0.03	<0.2482	<0.1838	<0.0696
Uranium-233/234	pCi/L	SOA	2.77	2.80	2.69	2.57	13.30	3.86
Uranium-234	pCi/L	SOA	NA	NA	NA	NA	NA	NA
Uranium-235	pCi/L	SOA	<0.0851	0.70	0.49	<0.479	0.41	<0.842
Uranium-238	pCi/L	SOA	5.15	4.17	3.99	4.87	6.83	6.70
Sum of Alphas			9.61	9.36	8.26	7.44	24.08	10.56
Sum of Betas			74.51	99.49	92.90	82.90	97.50	90.49

## F-Area WTU UIC Sample Results: July 1998

WSRC-TR-99-00012  
Unclassified

UIC Permitted Constituents	Reg	Raw	Rad	Qual.	QL	July	Exceedence	Notes
Constituent	Unit	Limit	Result	Acc		Result	Y/N	
<b>Section I, INORGANICS</b>								
Arsenic	µg/L	50	3		U	3	<3	N
Barium	µg/L	2000	15.7			0.2	15.70	N
Cadmium	µg/L	5	1		U	1	<1	N
Chromium	µg/L	100	3		U	3	<3	N
Lead	µg/L	50	2		U	2	<2	N
Mercury	µg/L	2	0.2		U	0.2	<0.2	N
Selenium	µg/L	50	5		U	5	<5	N
Silver	µg/L	50	1		U	1	<1	N
<b>Section II, ORGANICS</b>								
Antimony	µg/L	6	0.2		U	0.2	<0.2	N
Cobalt	µg/L	140	7.46			0.2	7.46	N
Copper	µg/L	1300	1.85			0.2	1.85	N
Cyanide	µg/L	200000	10		U	10	<10	N
Benzene	µg/L	5	1		U	1	<1	N
BEHP	µg/L	140	10.3		U	10.3	<10.3	N
Methylene Chloride	µg/L	5	1		U	1	<1	N
Nickel	µg/L	100	3.84			0.2	3.84	N
Phenol	µg/L	10	5		U	5	<5	N
Tetrachloroethylene	µg/L	5	1		U	1	<1	N
Thallium	µg/L	2	0.337		J	2.5	<2.5	N
Trichloroethylene	µg/L	5	1		U	1	<1	N
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N
Vanadium	µg/L	49	2		U	2	<2	N
Zinc	µg/L	5000	3.19		J	5	<5	N
<b>Section III, RADIONUCLIDES</b>								
Gross Alpha	pCi/L	15	3.1	0.999		1.06	3.10	N
Gross Beta	pCi/L	50	9.73	1.06		1.18	9.73	N
Total Radium (226+228)	pCi/L	5					2.85	N
<b>Section IV, RADIONUCLIDES</b>								
Americium-241	pCi/L	SOA	0.547	0.29		0.251	0.55	N
Cesium-137	pCi/L	SOB	3.26	3.53	UI	4.05	<4.05	N
Curium-242	pCi/L	SOA	0.0196	0.107	UI	0.3	<0.3	N
Curium-243/244	pCi/L	SOA	0.285	0.229	UI	0.339	<0.339	N
Curium-246	pCi/L	SOA	0.0331	0.0665	UI	0.0994	<0.0994	N
Carbon-14	pCi/L	SOB	-3.96	9.49	UI	16.6	<16.6	N
Cobalt-60	pCi/L	SOB	-0.972	2.09	UI	3.59	<3.59	N
Iodine-129	pCi/L	SOB	46.6	5.92		0.769	46.60	N
Plutonium-238	pCi/L	SOA	-0.0452	0.0411	UI	0.305	<0.305	N
Plutonium-239/240	pCi/L	SOA	-0.009	0.0181	UI	0.199	<0.199	N
Radium-226	pCi/L	SOR	1.14	0.618		0.237	1.14	N
Radium-228	pCi/L	SOR	1.71	0.506		0.867	1.71	N
Strontium-90	pCi/L	SOB	14.9	2.42		2.37	14.90	Y
Technetium-99	pCi/L	SOB	11.3	3.77		7.64	11.30	N
Thorium-228	pCi/L	SOA	0.12	0.14	UI	0.212	<0.212	N
Thorium-230	pCi/L	SOA	0.322	0.235	R	0.289	R	N
Thorium-232	pCi/L	SOA	-0.0323	0.0329	UIJ	0.254	<0.254	N
Uranium-233/234	pCi/L	SOA	2.77	0.641		0.229	2.77	N
Uranium-235	pCi/L	SOA	0.113	0.114	UI	0.0851	<0.0851	N
Uranium-238	pCi/L	SOA	5.15	0.954		0.196	5.15	N
Sum of Alphas							9.61	N
Sum of Betas							74.51	Y

# F-Area WTU UIC Sample Results: August 1998

WSRC-TR-99-00012  
Unclassified

UIC Permitted Constituents	Reg	Raw	Rad	Qual.	QL	August	Exceedence	Notes
Constituent	Unit	Limit	Result	Acc		Result	Y/N	
<b>Section I, INORGANICS</b>								
Arsenic	µg/L	50	3		U	3	<3	N
Barium	µg/L	2000	13.9			0.2	13.90	N
Cadmium	µg/L	5	1		U	1	<1	N
Chromium	µg/L	100	3		U	3	<3	N
Lead	µg/L	50	2		U	2	<2	N
Mercury	µg/L	2	0.094		J	0.2	<0.2	N
Selenium	µg/L	50	5		U	5	<5	N
Silver	µg/L	50	0.57		U	1	<1	N
<b>Section II, ORGANICS</b>								
Antimony	µg/L	6	0.186		U	0.2	<0.2	N
Cobalt	µg/L	140	2.37			0.2	2.37	N
Copper	µg/L	1300	2.1			0.2	2.10	N
Cyanide	µg/L	200000	10		U	10	<10	N
Benzene	µg/L	5	1		U	1	<1	N
BEHP	µg/L	140	9.9		U	9.9	<9.9	N
Methylene Chloride	µg/L	5	1		U	1	<1	N
Nickel	µg/L	100	0.989			0.2	0.99	N
Phenol	µg/L	10	5		U	5	<5	N
Tetrachloroethylene	µg/L	5	1		U	1	<1	N
Thallium	µg/L	2	0.655		U	2.5	<2.5	N
Trichloroethylene	µg/L	5	1		U	1	<1	N
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N
Vanadium	µg/L	49	2		U	2	<2	N
Zinc	µg/L	5000	5		U	5	<5	N
<b>Section III, RADIONUCLIDES</b>								
Gross Alpha	pCi/L	15	4.23	1.12		0.97	4.23	N
Gross Beta	pCi/L	50	9.36	1		1.06	9.36	N
Total Radium (226+228)	pCi/L	5					1.69	N
<b>Section IV, RADIONUCLIDES</b>								
Americium-241	pCi/L	SOA	0.419	0.435	UI	0.668	<0.668	N
Cesium-137	pCi/L	SOB	0.0574	2.08	UI	3.78	<3.78	N
Curium-242	pCi/L	SOA	0.59	0.566	UI	0.792	<0.792	N
Curium-243/244	pCi/L	SOA	1.56	0.92	R	1.11	R	N
Curium-246	pCi/L	SOA	0.289	0.361	UI	0.516	<0.516	N
Carbon-14	pCi/L	SOB	14.5	10.2	UI	16.8	<16.8	N
Cobalt-60	pCi/L	SOB	-1.78	1.61	UI	2.47	<2.47	N
Iodine-129	pCi/L	SOB	64.3	8.61		1.62	64.30	N
Plutonium-238	pCi/L	SOA	1.75	0.381	R	0.044	R	N
Plutonium-239/240	pCi/L	SOA	0.425	0.17	R	0.112	R	N
Radium-226	pCi/L	SOR	1.69	0.67		0.562	1.69	N
Radium-228	pCi/L	SOR	-0.0164	0.791	UI	1.81	<1.81	N
Strontium-90	pCi/L	SOB	9.59	2.07		2.5	9.59	Y
Technetium-99	pCi/L	SOB	25.6	4.78		7.18	25.60	N
Thorium-228	pCi/L	SOA	0.0929	0.464	UI	1.12	<1.12	N
Thorium-230	pCi/L	SOA	0.174	0.246	UI	0.43	<0.43	N
Thorium-232	pCi/L	SOA	0.122	0.2	UI	0.365	<0.365	N
Uranium-233/234	pCi/L	SOA	2.8	1.24		0.595	2.80	N
Uranium-235	pCi/L	SOA	0.7	0.613		0.691	0.70	N
Uranium-238	pCi/L	SOA	4.17	1.54		0.368	4.17	N
Sum of Alphas							9.36	N
Sum of Betas							99.49	Y

# F-Area WTU UIC Sample Results: September 1998

WSRC-TR-99-00012  
Unclassified

UIC Permitted Constituents	Reg	Raw	Rad	September	Exceedence	Notes			
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									
Arsenic	µg/L	50	3		U	3	<3	N	Samples collected 9/29/98
Barium	µg/L	2000	9.49			0.2	9.49	N	
Cadmium	µg/L	5	1		U	1	<1	N	
Chromium	µg/L	100	9.03		U	3	<3	N	
Lead	µg/L	50	2		U	2	<2	N	
Mercury	µg/L	2	0.059		J	0.2	<0.2	N	
Selenium	µg/L	50	1.61		U	5	<5	N	
Silver	µg/L	50	1		U	1	<1	N	
Section II, ORGANICS									
Antimony	µg/L	6	0.2		U	0.2	<0.2	N	DL too high
Cobalt	µg/L	140	1.81			0.2	1.81	N	
Copper	µg/L	1300	5.31			0.2	5.31	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	10.8		U	10.8	<10.8	N	
Methylene Chloride	µg/L	5	5.3		U	5	<5	N	
Nickel	µg/L	100	0.941			0.2	0.94	N	
Phenol	µg/L	10	5		U	5	<5	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Thallium	µg/L	2	0.341		J	2.5	<2.5	N	
Trichloroethylene	µg/L	5	0.841		J	1	<1	N	
Trichlorofluoromethane	µg/L	100	5		U	5	<5	N	
Vanadium	µg/L	49	2		U	2	<2	N	
Zinc	µg/L	5000	5		U	5	<5	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	6.22	2.08		1.77	6.22	N	
Gross Beta	pCi/L	50	16.2	1.89		1.76	16.20	N	
Total Radium (226+228)	pCi/L	5					0.84	N	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	0.468	0.354	UI	0.569	<0.569	N	Rejected Analysis
Cesium-137	pCi/L	SOB	-0.133	2.25	UI	3.97	<3.97	N	
Curium-242	pCi/L	SOA	0.109	0.246	UI	0.517	<0.517	N	
Curium-243/244	pCi/L	SOA	0.351	0.523	UI	1	<1	N	
Curium-246	pCi/L	SOA	0	0	UI	0.127	<0.127	N	Rejected Analysis
Carbon-14	pCi/L	SOB	48.8	6.53		8.48	48.80	N	
Cobalt-60	pCi/L	SOB	0.104	2.2	UI	4.07	<4.07	N	
Iodine-129	pCi/L	SOB	58.2	8.09		2.24	58.20	Y	
Plutonium-238	pCi/L	SOA	0.897	0.619	R	0.299	R	N	Rejected Analysis
Plutonium-239/240	pCi/L	SOA	-0.0239	0.048	UI	0.526	<0.526	N	
Radium-226	pCi/L	SOR	0.839	0.57		0.618	0.84	N	Rejected Analysis
Radium-228	pCi/L	SOR	-1.7	0.821	UI	2.11	<2.11	N	
Strontium-90	pCi/L	SOB	9.3	1.31		1.42	9.30	Y	
Technetium-99	pCi/L	SOB	25.4	4.35		8.17	25.40	N	
Thorium-228	pCi/L	SOA	0.253	0.124		0.147	0.25	N	Rejected Analysis
Thorium-230	pCi/L	SOA	0.0449	0.0525	UI	0.087	<0.087	N	
Thorium-232	pCi/L	SOA	0.01	0.0201	UI	0.03	<0.03	N	
Uranium-233/234	pCi/L	SOA	2.69	0.781		0.593	2.69	N	
Uranium-235	pCi/L	SOA	0.486	0.317		0.339	0.49	N	
Uranium-238	pCi/L	SOA	3.99	0.938		0.278	3.99	N	
Sum of Alphas							8.26	N	
Sum of Betas							92.90	Y	

# F-Area WTU UIC Sample Results: October 1998

WSRC-TR-99-00012  
Unclassified

UIC Permitted Constituents	Reg	Raw	Rad	Qual.	QL	October	Exceedence	Notes
Constituent	Unit	Limit	Result	Acc		Result	Y/N	
<b>Section I, INORGANICS</b>								
Arsenic	µg/L	50	3		U	3	<3	N
Barium	µg/L	2000	16.3			0.2	16.30	N
Cadmium	µg/L	5	1		U	1	<1	N
Chromium	µg/L	100	3		U	3	<3	N
Lead	µg/L	50	2		U	2	<2	N
Mercury	µg/L	2	0.2		U	0.2	<0.2	N
Selenium	µg/L	50	5		U	5	<5	N
Silver	µg/L	50	1		U	1	<1	N
<b>Section II, ORGANICS</b>								
Antimony	µg/L	6	0.226			0.2	0.23	N
Cobalt	µg/L	140	1.33			0.2	1.33	N
Copper	µg/L	1300	2.85			0.2	2.85	N
Cyanide	µg/L	200000	10		U	10	<10	N
Benzene	µg/L	5	1		U	1	<1	N
BEHP	µg/L	140	10		U	10	<10	N
Methylene Chloride	µg/L	5	5		U	5	<5	N
Nickel	µg/L	100	0.2		U	0.2	<0.2	N
Phenol	µg/L	10	5		U	5	<5	N
Tetrachloroethylene	µg/L	5	1		U	1	<1	N
Thallium	µg/L	2	0.369		J	2.5	<2.5	N
Trichloroethylene	µg/L	5	0.912		J	1	<1	N
Trichlorofluoromethane	µg/L	100	5		U	5	<5	N
Vanadium	µg/L	49	2		U	2	<2	N
Zinc	µg/L	5000	5		U	5	<5	N
<b>Section III, RADIONUCLIDES</b>								
Gross Alpha	pCi/L	15	9.94	3.7	J	12.13	<12.13	N
Gross Beta	pCi/L	50	40.4	5.98		20.11	40.40	N
Total Radium (226+228)	pCi/L	5					BDL	N
<b>Section IV, RADIONUCLIDES</b>								
Americium-241	pCi/L	SOA	0.168	0.146	Jl	0.46	<0.46	N
Cesium-137	pCi/L	SOB	-0.802	2.01	U	7.51	<7.51	N
Curium-242	pCi/L	SOA	-0.0075	0.0107	U	0.1874	<0.1874	N
Curium-243/244	pCi/L	SOA	0.0645	0.106	U	0.429	<0.429	N
Curium-246	pCi/L	SOA	0.0298	0.0599	U	0.2092	<0.2092	N
Carbon-14	pCi/L	SOB	60.1	10.5		35.9	60.10	Y
Cobalt-60	pCi/L	SOB	-0.0057	1.83	U	7.17	<7.17	N
Iodine-129	pCi/L	SOB	22.8	3.46		8.23	22.80	N
Plutonium-238	pCi/L	SOA	-0.0152	0.0154	U	0.1508	<0.1508	N
Plutonium-239/240	pCi/L	SOA	0.0121	0.0327	U	0.1491	<0.1491	N
Radium-226	pCi/L	SOR	0.751	0.493	Jl	1.609	<1.609	N
Radium-228	pCi/L	SOR	0.915	0.784	U	4.024	<4.024	N
Strontium-90	pCi/L	SOB	2.51	1.29	Jl	5.07	<5.07	N
Technetium-99	pCi/L	SOB	25.2	5.49	R	19.98	R	N
Thorium-228	pCi/L	SOA	0.0139	0.105	U	0.511	<0.511	N
Thorium-230	pCi/L	SOA	0.0791	0.102	U	0.355	<0.355	N
Thorium-232	pCi/L	SOA	0.0252	0.0581	U	0.2482	<0.2482	N
Uranium-233/234	pCi/L	SOA	2.57	0.659		1.454	2.57	N
Uranium-235	pCi/L	SOA	0.233	0.171	Jl	0.479	<0.479	N
Uranium-238	pCi/L	SOA	4.87	1.02		2.1286	4.87	N
Sum of Alphas							7.44	N
Sum of Betas							82.90	Y

# F-Area WTU UIC Sample Results: November 1998

WSRC-TR-99-00012  
Unclassified

UIC Permitted Constituents			Reg	Raw	Rad		November	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									
Arsenic	µg/L	50	3		U	3	<3	N	Samples collected 11/17/98
Barium	µg/L	2000	0.2		U	0.2	<0.2	N	
Cadmium	µg/L	5	1		U	1	<1	N	
Chromium	µg/L	100	2.46		U	3	<3	N	
Lead	µg/L	50	2		U	2	<2	N	
Mercury	µg/L	2	0.0665		J	0.2	<0.2	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	1		U	1	<1	N	
Section II, ORGANICS									
Antimony	µg/L	6	0.2		U	0.2	<0.2	N	DL too high
Cobalt	µg/L	140	0.031		U	0.2	<0.2	N	
Copper	µg/L	1300	0.2		U	0.2	<0.2	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		UJ	1	<1	N	
BEHP	µg/L	140	10		U	10	<10	N	
Methylene Chloride	µg/L	5	5		UJ	5	<5	N	
Nickel	µg/L	100	0.2		U	0.2	<0.2	N	
Phenol	µg/L	10	5		U	5	<5	N	
Tetrachloroethylene	µg/L	5	1		UJ	1	<1	N	
Thallium	µg/L	2	0.092		U	2.5	<2.5	N	
Trichloroethylene	µg/L	5	0.93		J	1	<1	N	
Trichlorofluoromethane	µg/L	100	5		UJ	5	<5	N	
Vanadium	µg/L	49	2		U	2	<2	N	
Zinc	µg/L	5000	5		U	5	<5	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	18.6	4.72		12.73	18.60	Y	
Gross Beta	pCi/L	50	41.6	4.15		11.83	41.60	N	
Total Radium (226+228)	pCi/L	5					BDL	N	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	3.54	0.869	Jl	1.904	3.54	N	
Cesium-137	pCi/L	SOB	-0.409	2.03	U	7.62	<7.62	N	
Curium-242	pCi/L	SOA	-0.0424	0.0385	U	0.287	<0.287	N	
Curium-243/244	pCi/L	SOA	0.78	0.298	Jl	0.865	<0.865	N	
Curium-246	pCi/L	SOA	0.208	0.135	Jl	0.3343	<0.3343	N	
Carbon-14	pCi/L	SOB	12.6	5.66	Jl	20.35	<20.35	N	
Cobalt-60	pCi/L	SOB	0.032	1.9	U	7.36	<7.36	N	
Iodine-129	pCi/L	SOB	97.5	12.5		26.84	97.50	Y	
Plutonium-238	pCi/L	SOA	0.345	0.156	U	0.456	<0.456	N	
Plutonium-239/240	pCi/L	SOA	0.0128	0.0411	U	0.1882	<0.1882	N	
Radium-226	pCi/L	SOR	1.9	0.697	U	1.946	<1.946	N	
Radium-228	pCi/L	SOR	-0.795	1.16	U	4.97	<4.97	N	
Strontium-90	pCi/L	SOB	12	1.77	J	5.73	<5.73	N	
Technetium-99	pCi/L	SOB	28.7	10.6	J	42.1	<42.1	N	
Thorium-228	pCi/L	SOA	0.0343	0.115	U	0.503	<0.503	N	
Thorium-230	pCi/L	SOA	0.211	0.137	J	0.377	<0.377	N	
Thorium-232	pCi/L	SOA	0.0149	0.0404	U	0.1838	<0.1838	N	
Uranium-233/234	pCi/L	SOA	13.3	3.57		8.29	13.30	N	
Uranium-235	pCi/L	SOA	0.412	0.111		0.2416	0.41	N	
Uranium-238	pCi/L	SOA	6.83	0.781		1.618	6.83	N	
Sum of Alphas							24.08	Y	
Sum of Betas							97.50	Y	

# F-Area WTU UIC Sample Results: December 1998

WSRC-TR-99-00012  
Unclassified

UIC Permitted Constituents		Reg	Raw	Rad			December	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 12/21/98
Arsenic	µg/L	50	3		U	3	<3	N	
Barium	µg/L	2000	25.3			0.2	25.30	N	
Cadmium	µg/L	5	1		U	1	<1	N	
Chromium	µg/L	100	3		U	3	<3	N	
Lead	µg/L	50	1.04		JI	2	<2	N	
Mercury	µg/L	2	0.111		JI	0.2	<0.2	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	1		U	1	<1	N	
Section II, ORGANICS									
Antimony	µg/L	6	0.2		U	0.2	<0.2	N	
Cobalt	µg/L	140	3.53			0.2	3.53	N	
Copper	µg/L	1300	4.87			0.2	4.87	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	10.4		UJ	10.4	<10.4	N	
Methylene Chloride	µg/L	5	5		U	5	<5	N	
Nickel	µg/L	100	1.43			0.2	1.43	N	
Phenol	µg/L	10	5		U	5	<5	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Thallium	µg/L	2	0.244			2.5	<2.5		DL too high
Trichloroethylene	µg/L	5	1		U	1	<1	N	
Trichlorofluoromethane	µg/L	100	5		U	5	<5	N	
Vanadium	µg/L	49	2		U	2	<2	N	
Zinc	µg/L	5000	5		U	5	<5	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	9.56	5.02	JI	16.15	<16.15	N	ssEQL too high, result OK
Gross Beta	pCi/L	50	15.5	4.66	JI	16.29	<16.29	N	
Total Radium (226+228)	pCi/L	5					BDL	N	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	0.255	277	U	1	<1	N	
Cesium-137	pCi/L	SOB	1.33	2.41	U	7.67	<7.67	N	
Curium-242	pCi/L	SOA	0	0	U	0.198	<0.198	N	
Curium-243/244	pCi/L	SOA	0.383	0.32	JI	0.832	<0.832	N	
Curium-246	pCi/L	SOA	0	0	U	0.191	<0.191	N	
Carbon-14	pCi/L	SOB	25.4	5.43		18.27	25.40	N	
Cobalt-60	pCi/L	SOB	0.762	2.18	U	8.27	<8.27	N	
Iodine-129	pCi/L	SOB	32.4	5.1		12.24	32.40	N	
Plutonium-238	pCi/L	SOA	0.0156	0.12	U	0.626	<0.626	N	
Plutonium-239/240	pCi/L	SOA	0.0704	0.115	U	0.441	<0.441	N	
Radium-226	pCi/L	SOR	1.2	0.513	JI	1.412	<1.412	N	
Radium-228	pCi/L	SOR	-2.23	0.619	U	2.398	<2.398	N	
Strontium-90	pCi/L	SOB	5.09	0.924		3.158	5.09	N	
Technetium-99	pCi/L	SOB	27.6	6.75		25.6	27.60	N	
Thorium-228	pCi/L	SOA	-0.107	0.136	U	0.661	<0.661	N	
Thorium-230	pCi/L	SOA	0.255	0.17	U	0.518	<0.518	N	
Thorium-232	pCi/L	SOA	0	0	U	0.0696	<0.0696	N	
Uranium-233/234	pCi/L	SOA	3.86	0.844		2.013	3.86	N	
Uranium-235	pCi/L	SOA	0.639	0.306	JI	0.842	<0.842	N	
Uranium-238	pCi/L	SOA	6.7	1.21		2.519	6.70	N	
Sum of Alphas							10.56	N	
Sum of Betas							90.49	Y	



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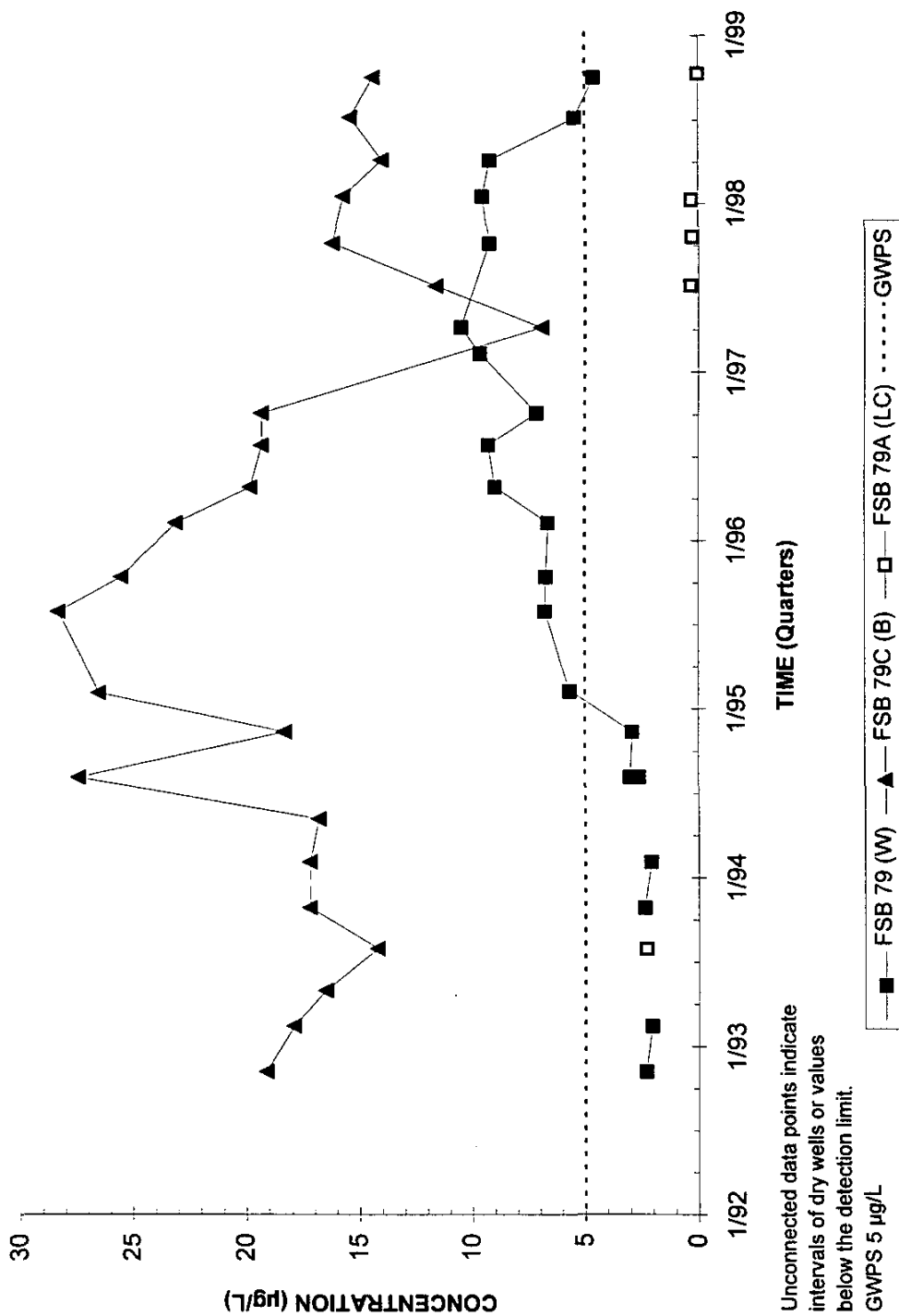
## **Appendix D**

### **Time Series Plots**

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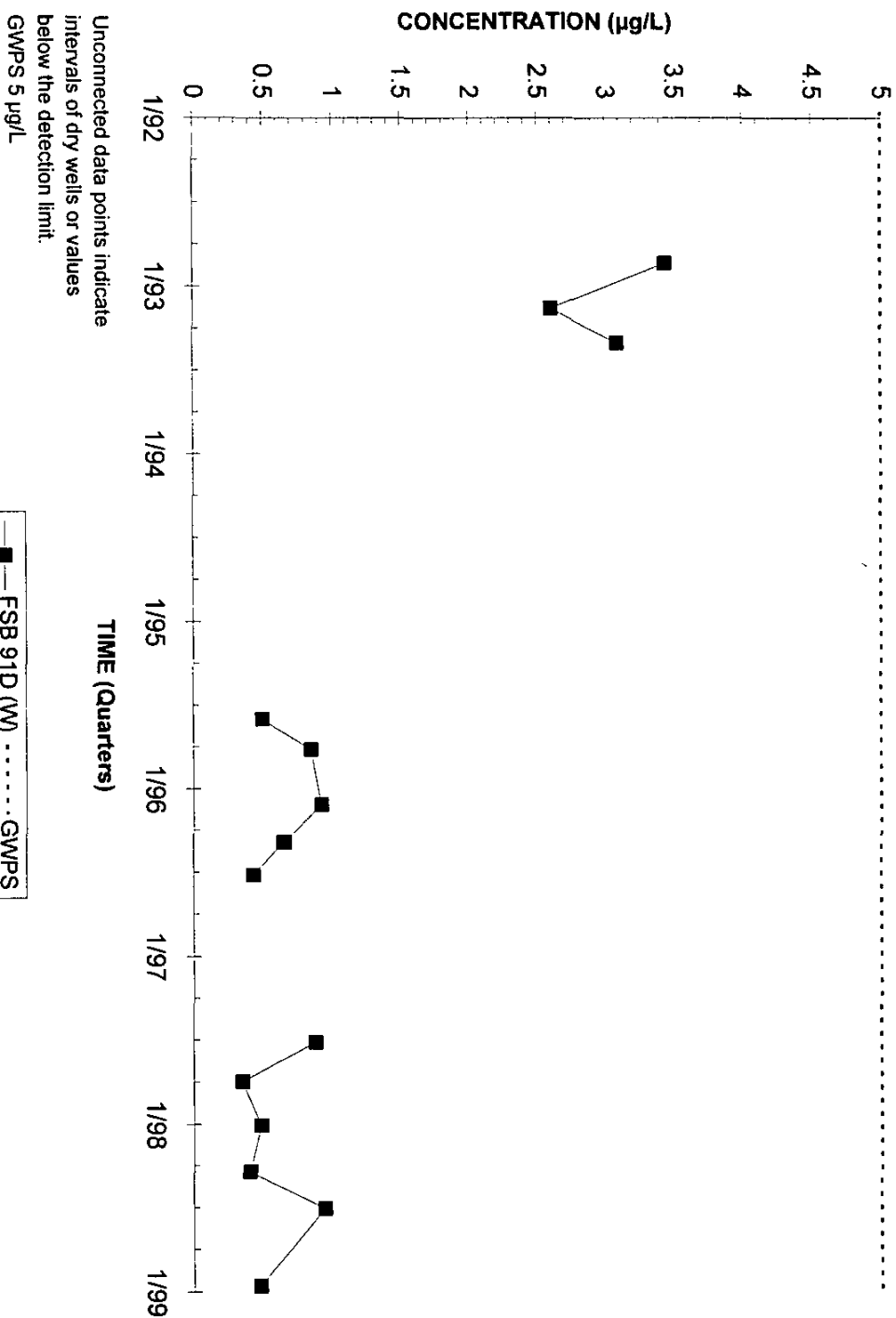
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## Cadmium Concentrations Well Cluster FSB 79



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Cadmium Concentrations Well FSB 91D



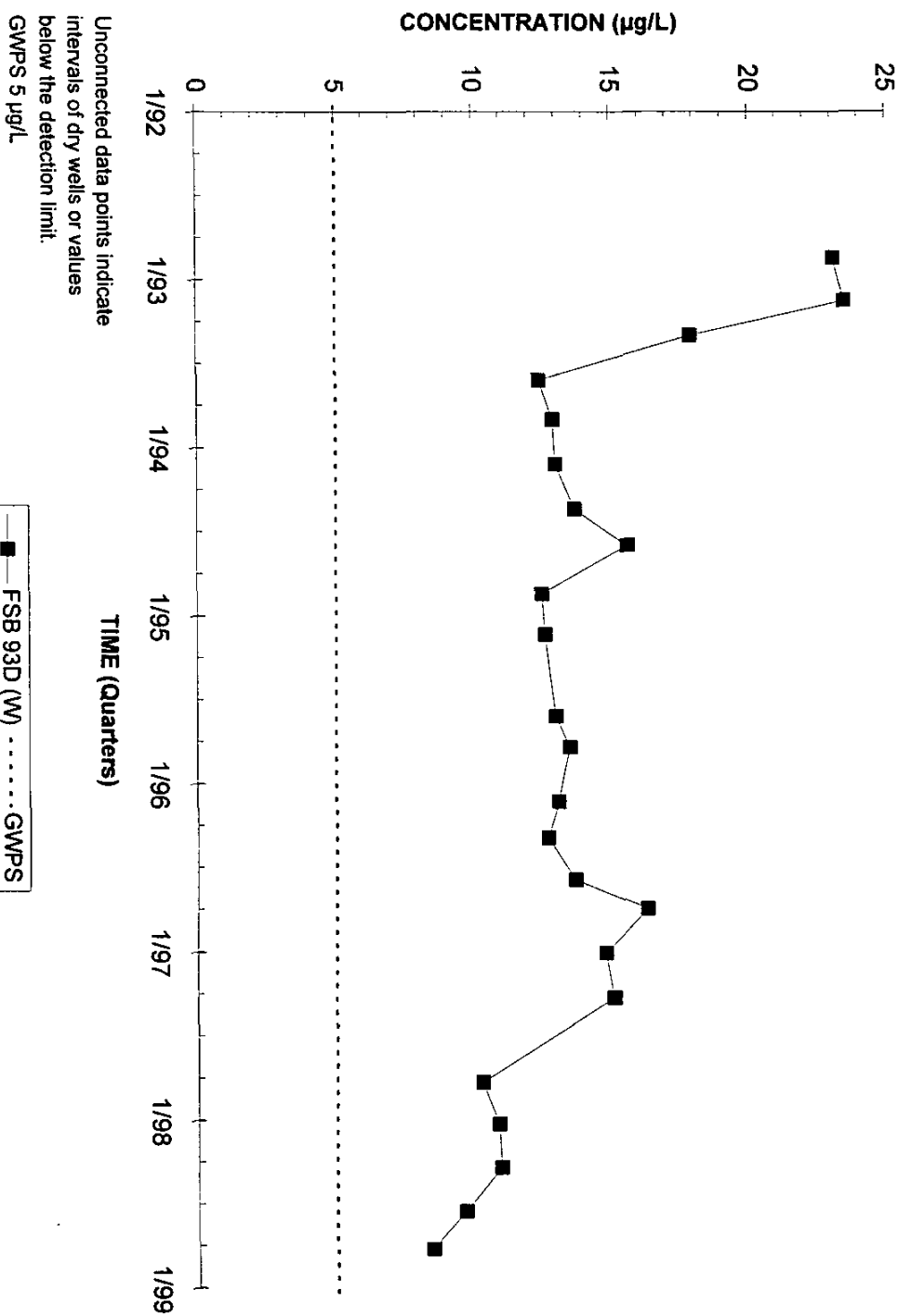
Note: W=Water Table (11B2); B=Barrowell (11B1); M=McBean (11B1); UC=Upper Congaree (11A); MC=Middle Congaree (11A); LC=Lower Congaree (11A)

F-Area HWMF

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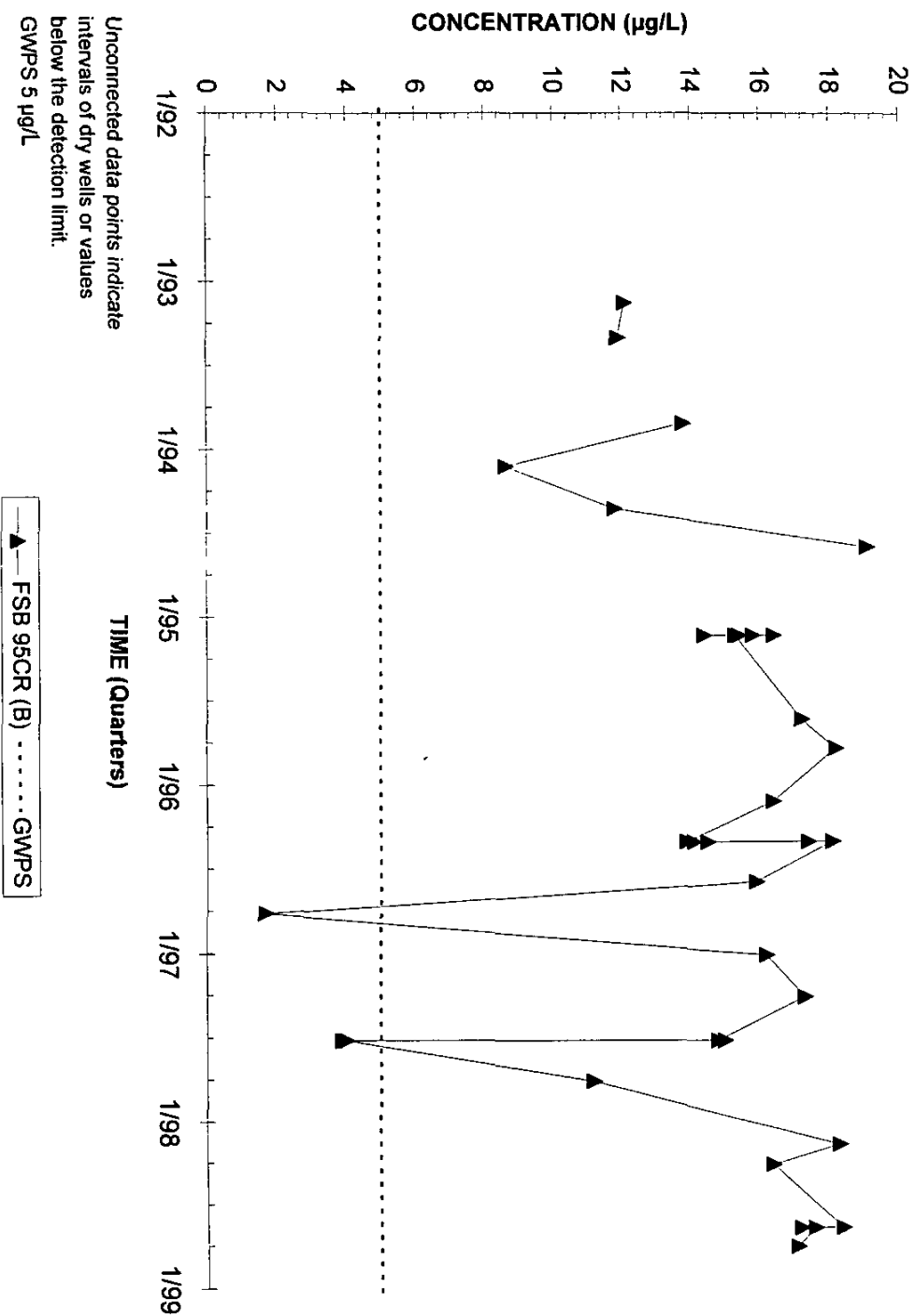
## Cadmium Concentrations Well FSB 93D



Note: W=Water Table (11B2); B=Barrowell (11B1); M=McBean (11B1); UC=Upper Congaree (11A); MC=Middle Congaree (11A); LC=Lower Congaree (11A)

F-Area HWMF

## Cadmium Concentrations Well FSB 95CR



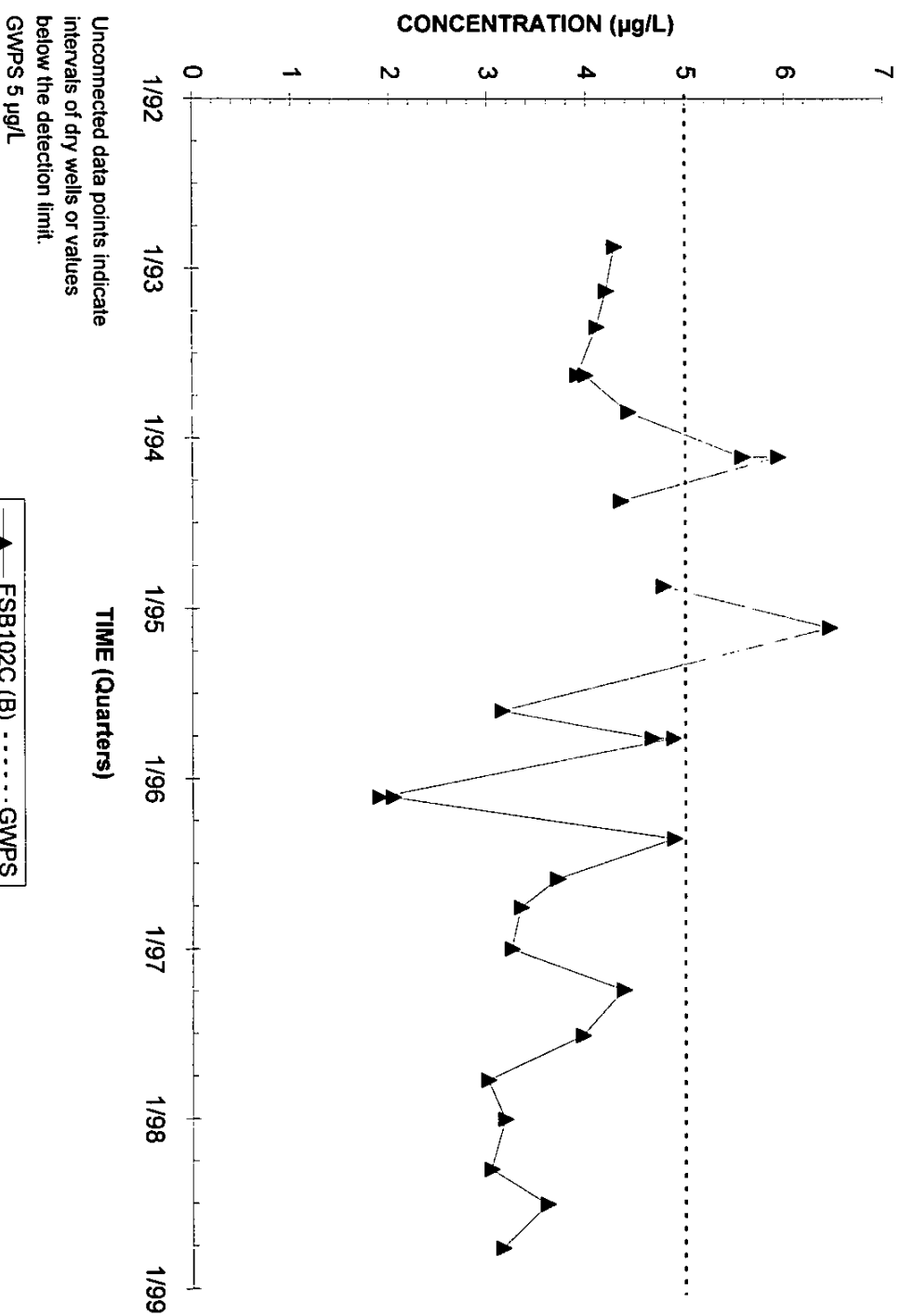
Note: W=Water Table (11B2); B=Barnwell (11B1); M=McBean (11B1); UC=Upper Congaree (11A); MC=Middle Congaree (11A); LC=Lower Congaree (11A)

F-Area HWMF

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## Cadmium Concentrations Well FSB102C



Note: W=Water Table (11B2); B=Barnwell (11B1); M=McBean (11B1); UC=Upper Congaree (11A); MC=Middle Congaree (11A); LC=Lower Congaree (11A)

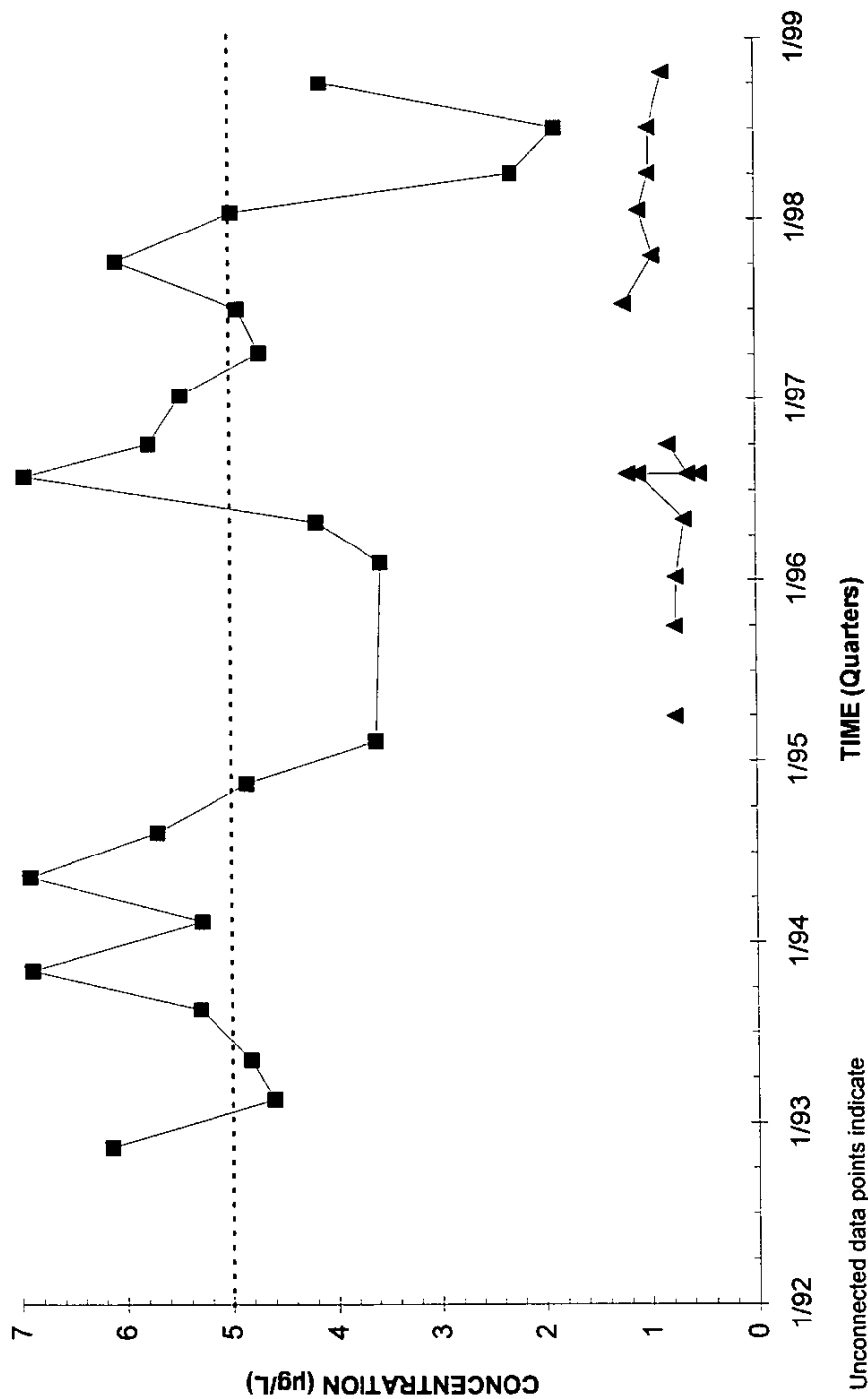
F-Area HWMF

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Third and Fourth Quarter 1998



## Cadmium Concentrations Well Cluster FSB104



Unconnected data points indicate intervals of dry wells or values below the detection limit.  
GWPS 5 µg/L

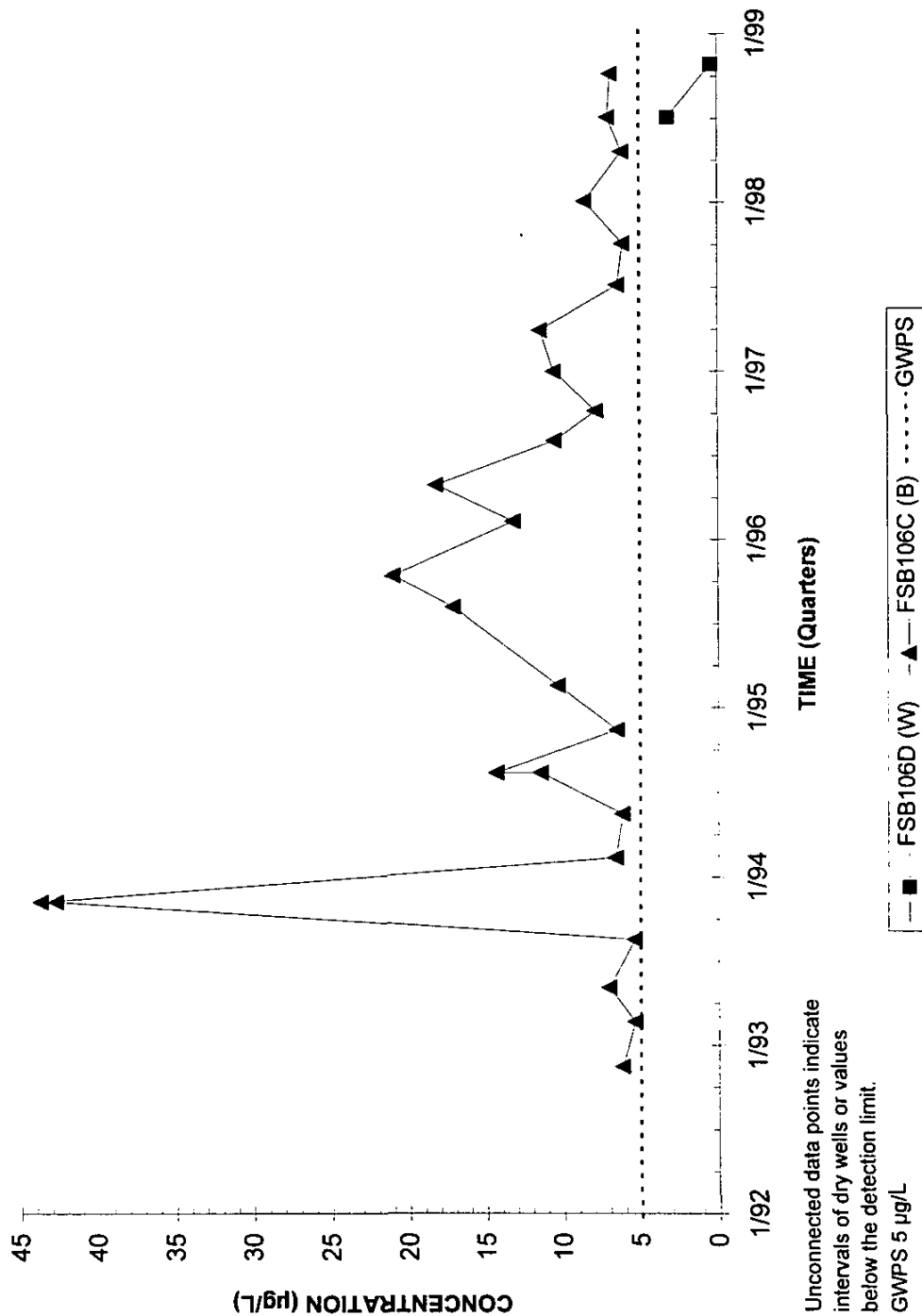
Note: W=Water Table (IIB2); B=Bamwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

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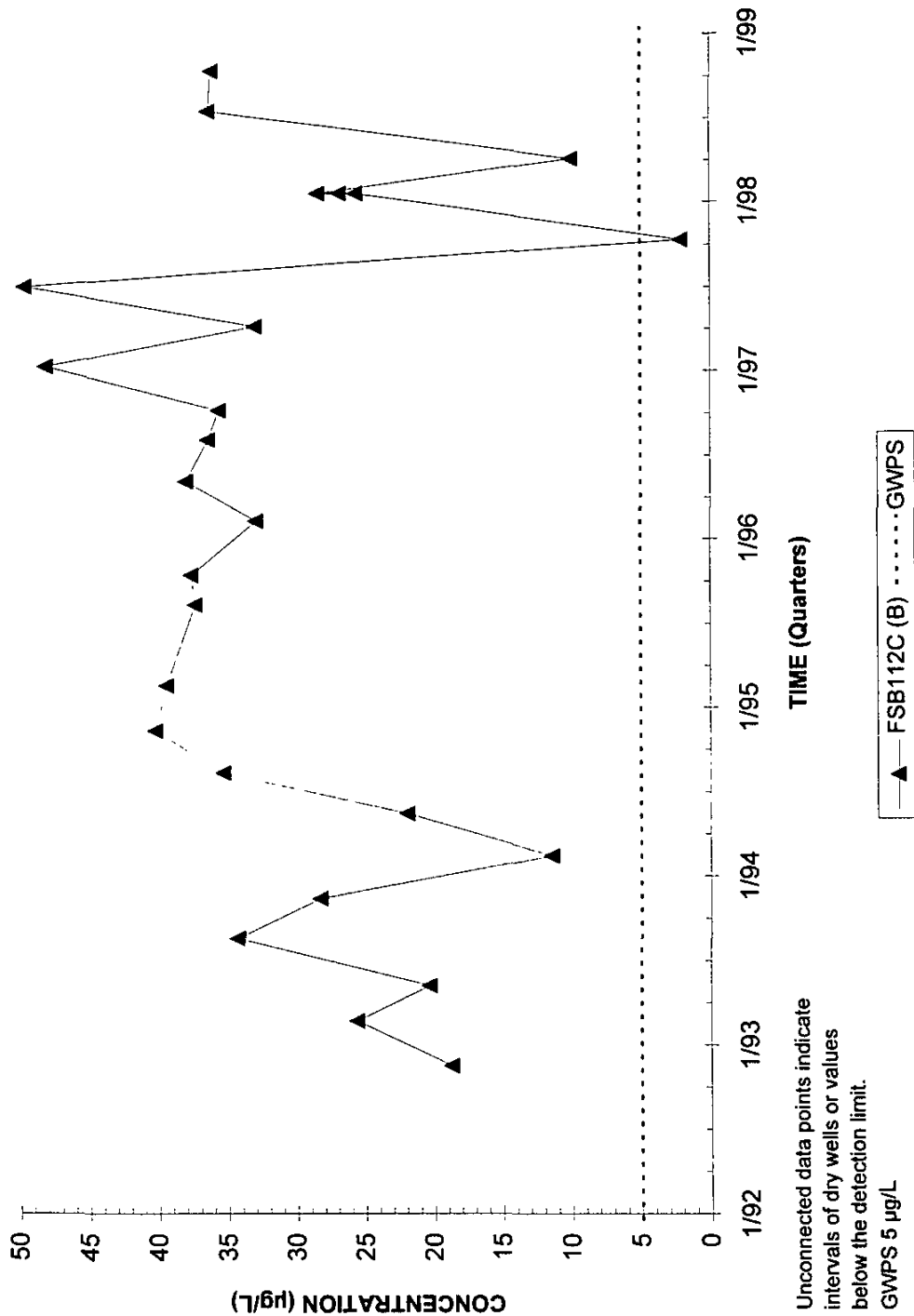
Third and Fourth Quarter 1998

## Cadmium Concentrations Well Cluster FSB106



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Cadmium Concentrations Well FSB112C



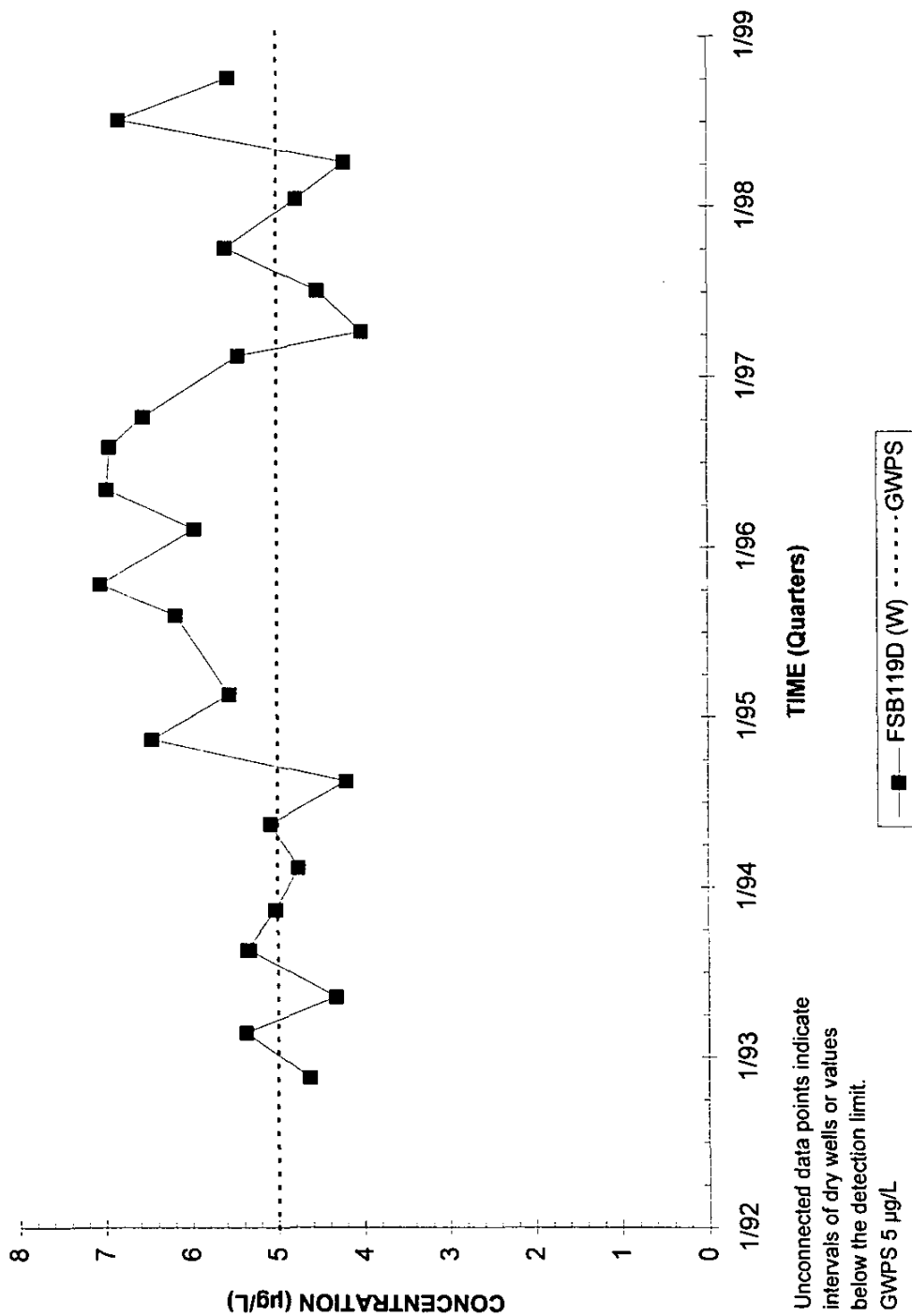
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

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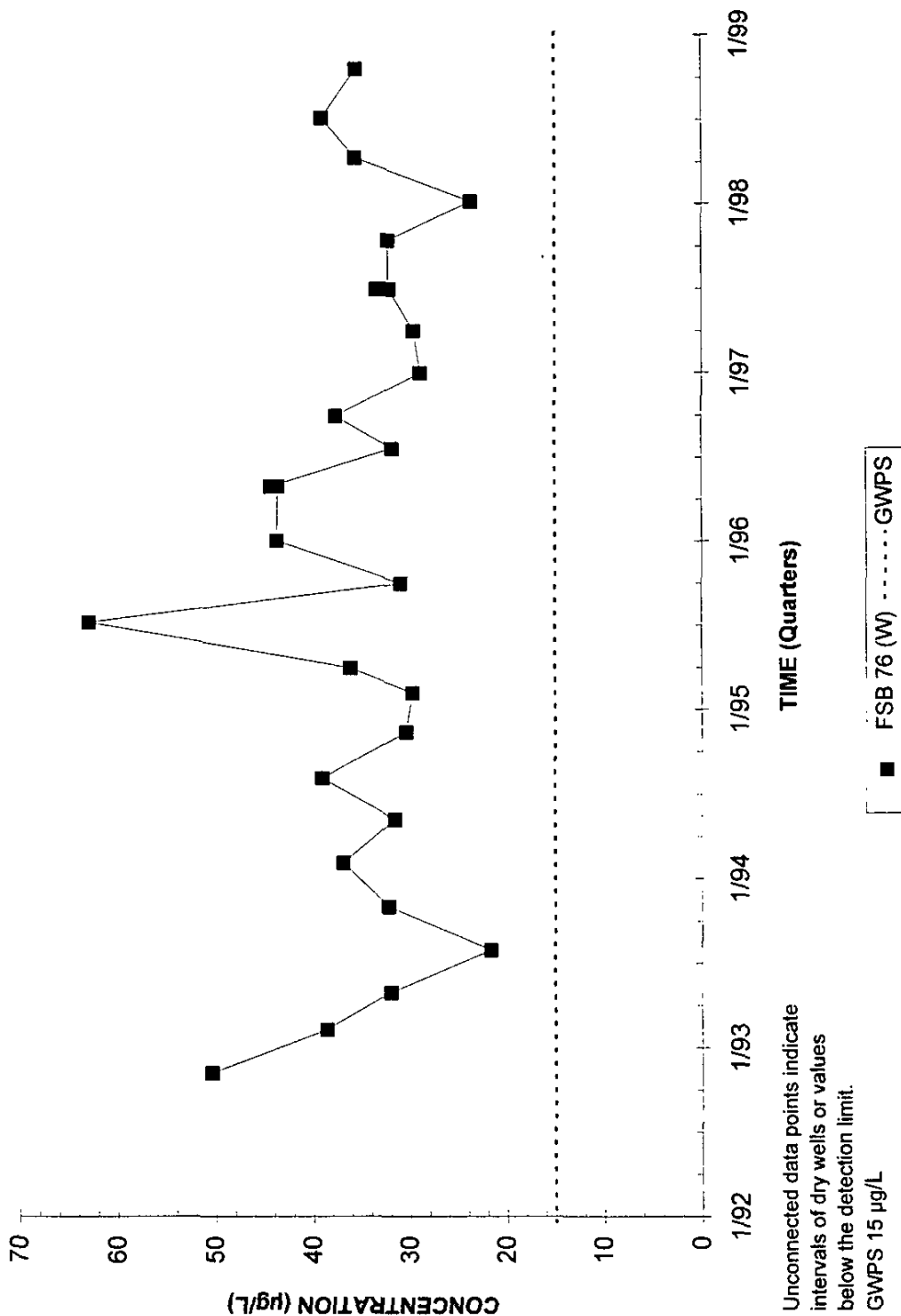
Third and Fourth Quarter 1998

# Cadmium Concentrations Well FSB119D



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Lead Concentrations Well FSB 76



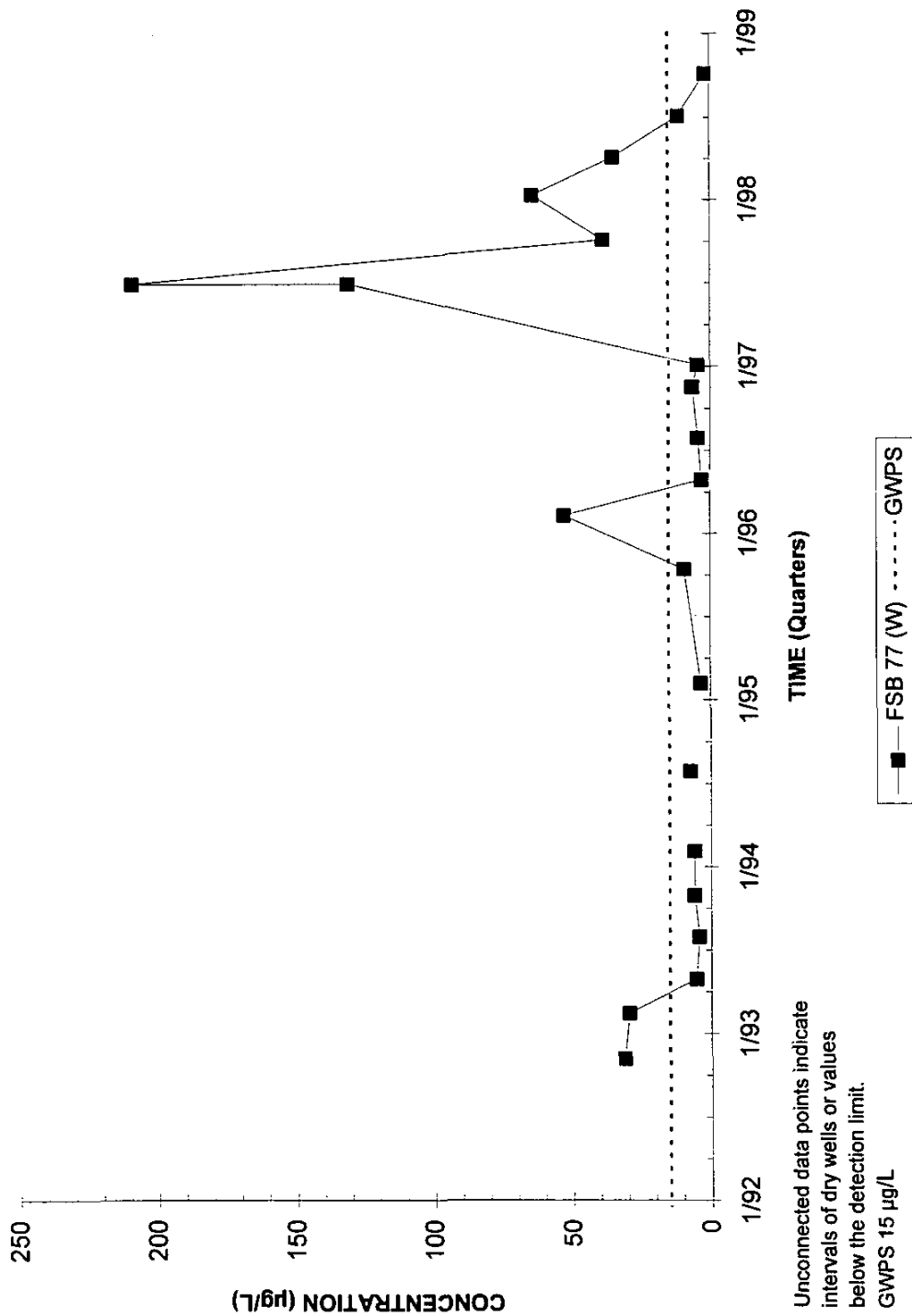
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F.Area HWMF

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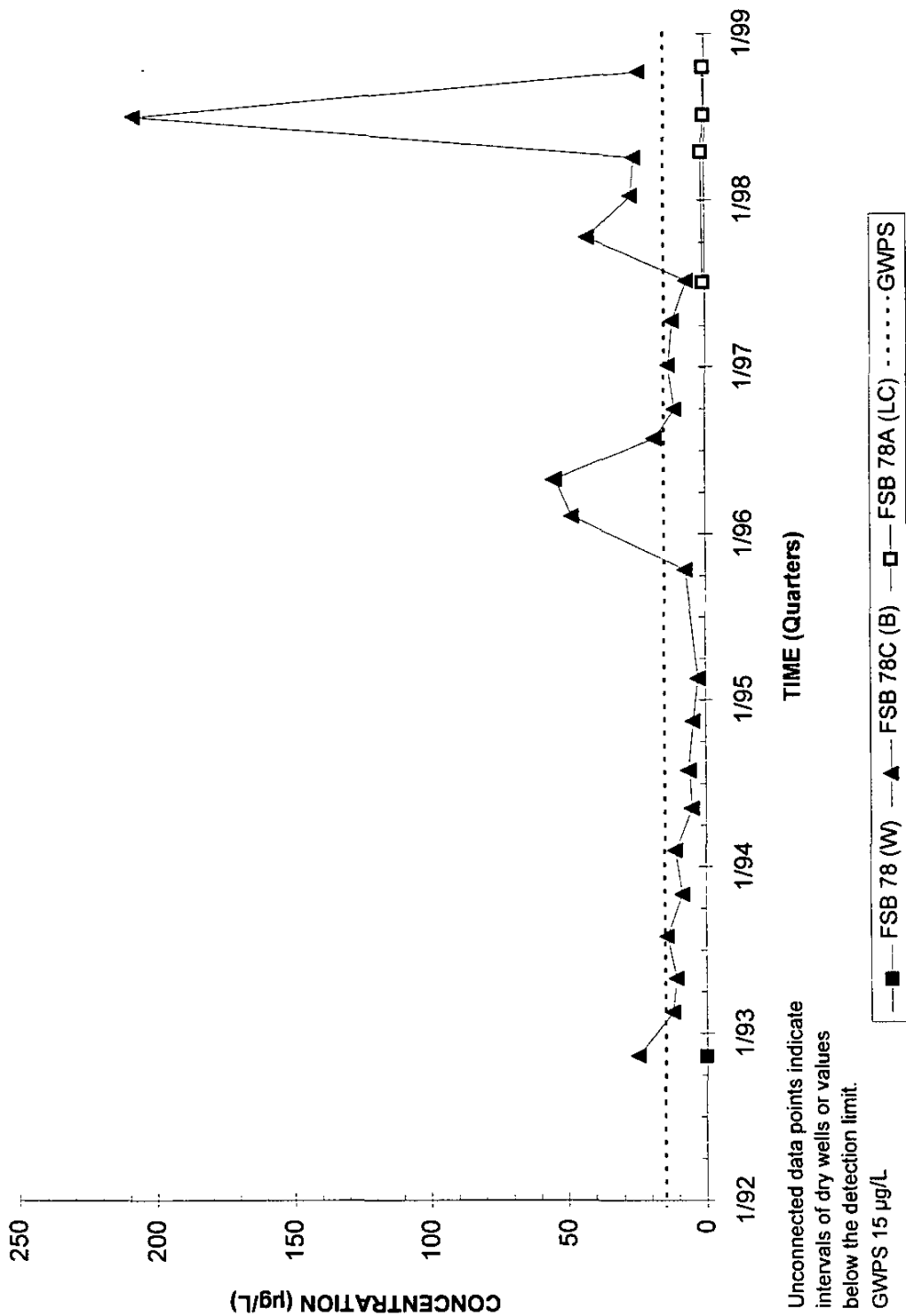
Third and Fourth Quarter 1998

## Lead Concentrations Well FSB 77



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Lead Concentrations Well Cluster FSB 78



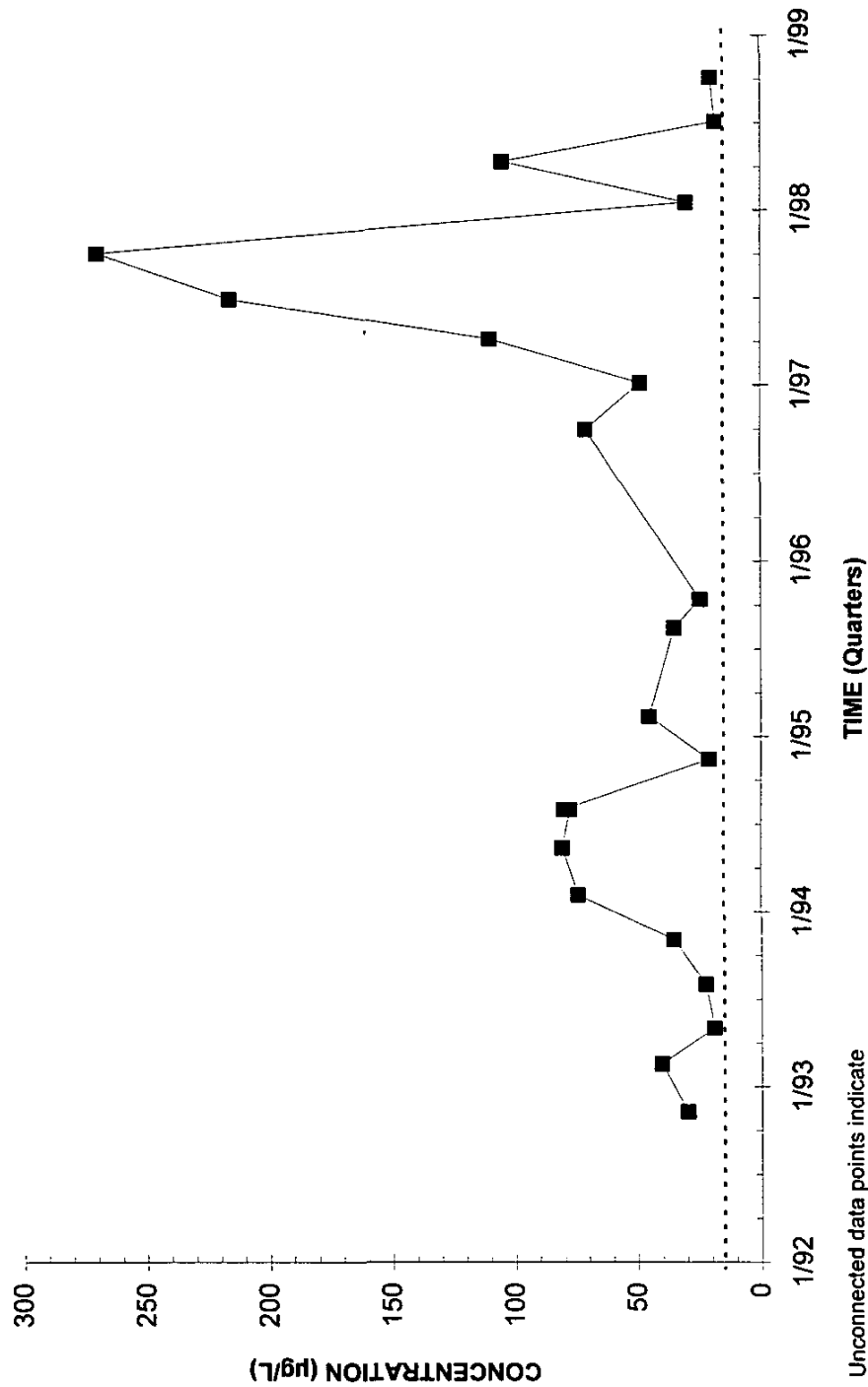
Note: W=Water Table (IIB1); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

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## Lead Concentrations Well FSB 90D



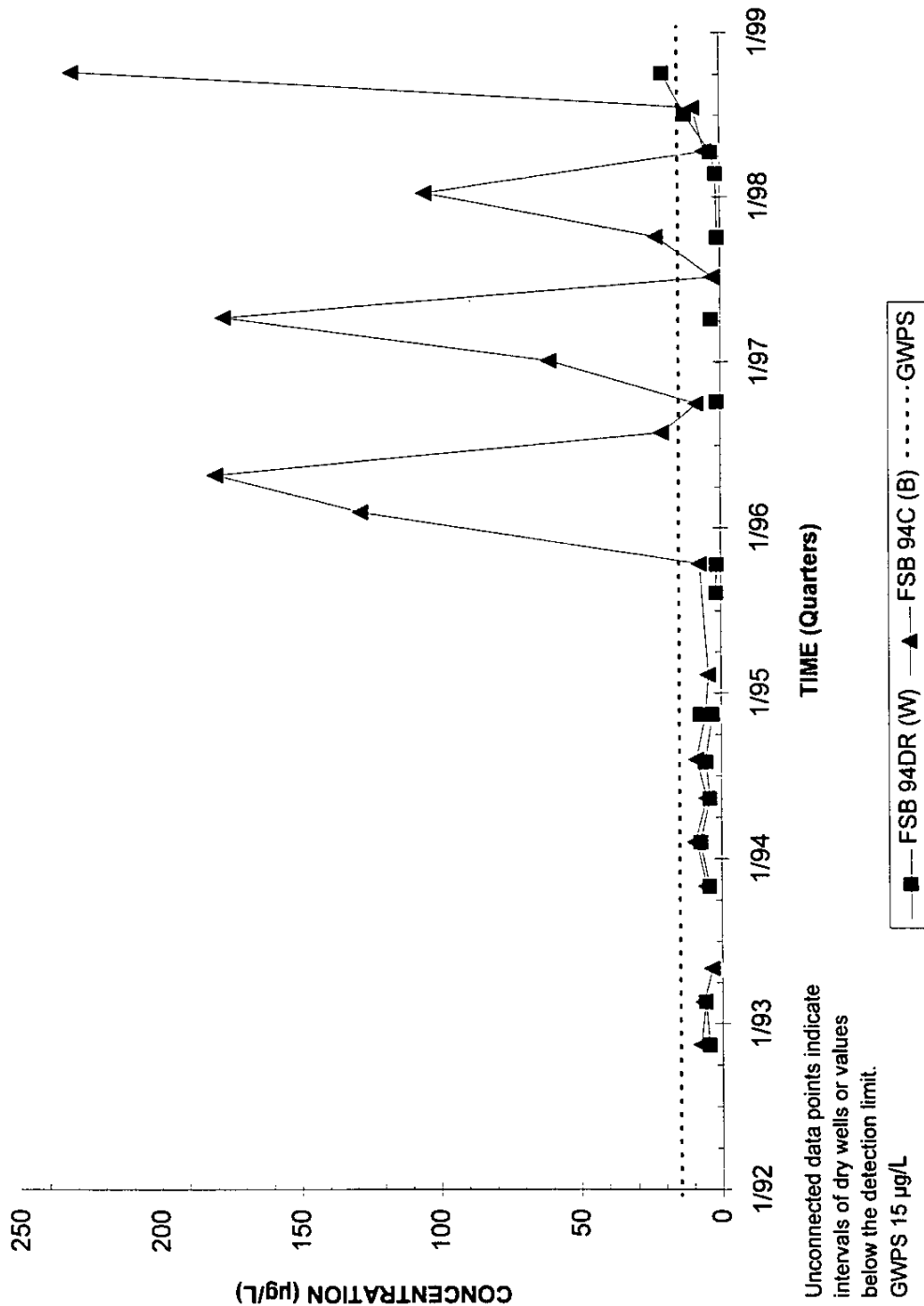
Unconnected data points indicate intervals of dry wells or values below the detection limit.  
GWPS 15 µg/L

■ FSB 90D (W) ..... GWPS

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



## Lead Concentrations Well Cluster FSB 94



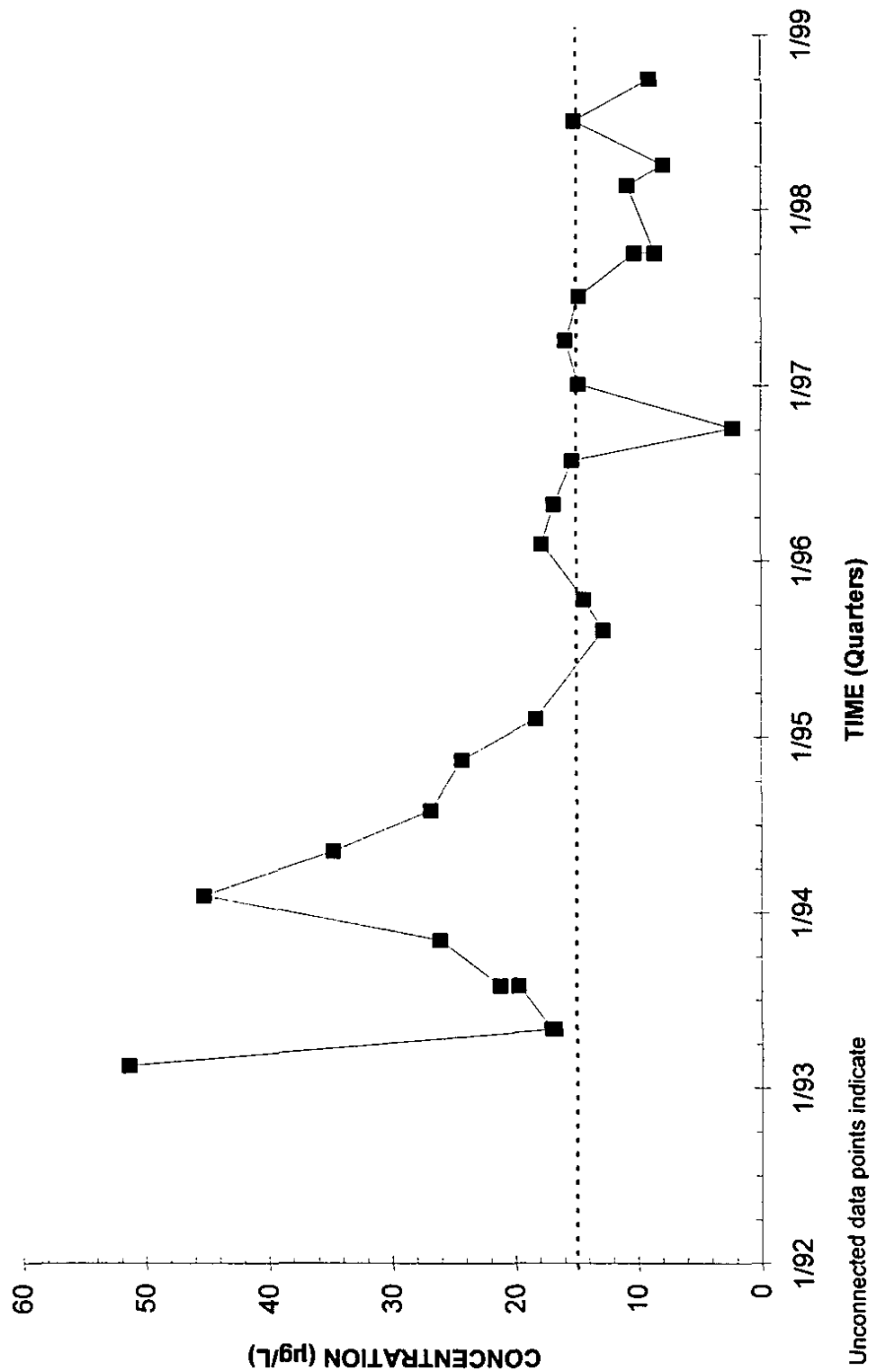
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

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Third and Fourth Quarter 1998

# Lead Concentrations Well FSB 95DR



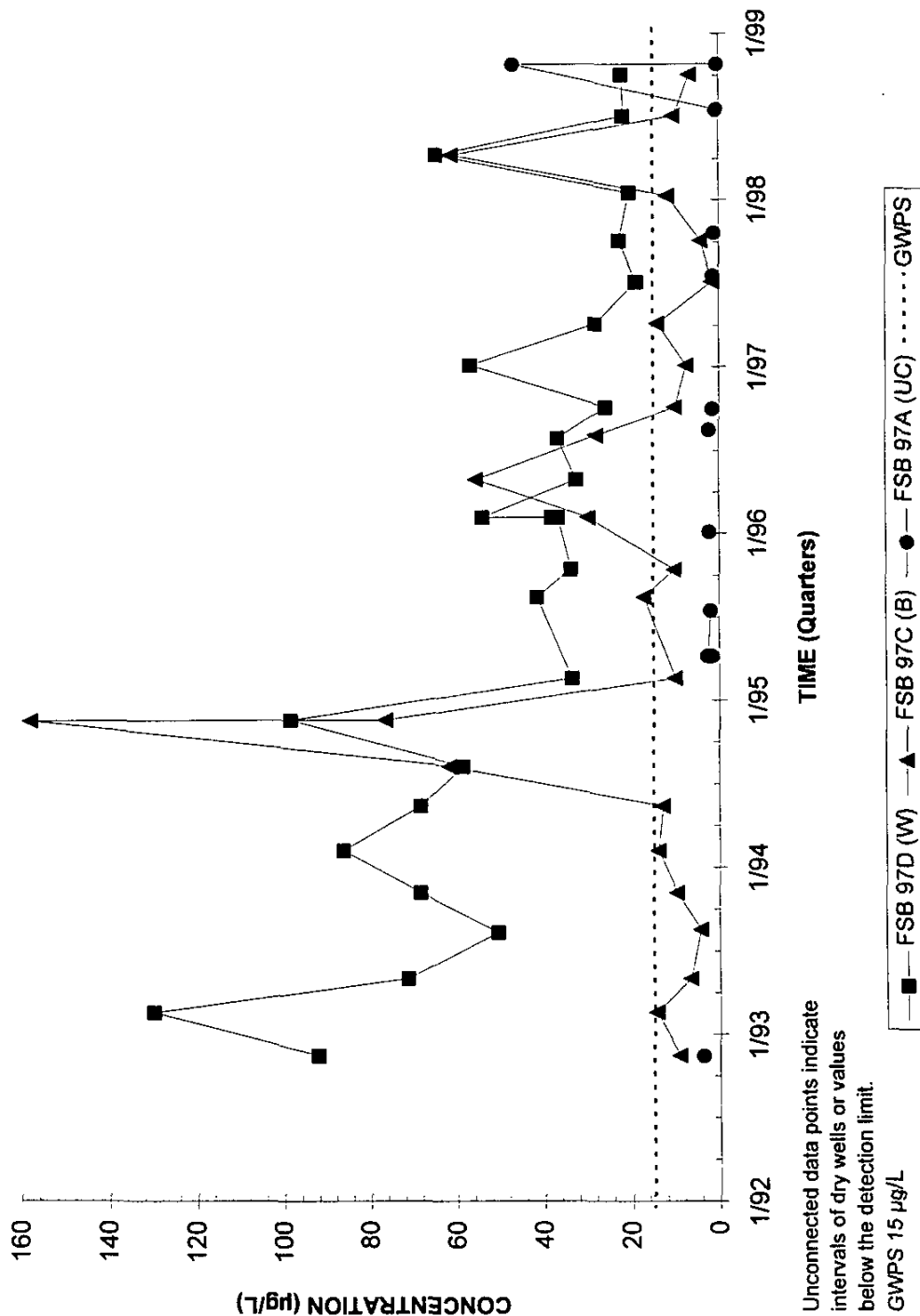
Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 15 µg/L

—■— FSB 95DR (W) ..... GWPS

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Lead Concentrations Well Cluster FSB 97



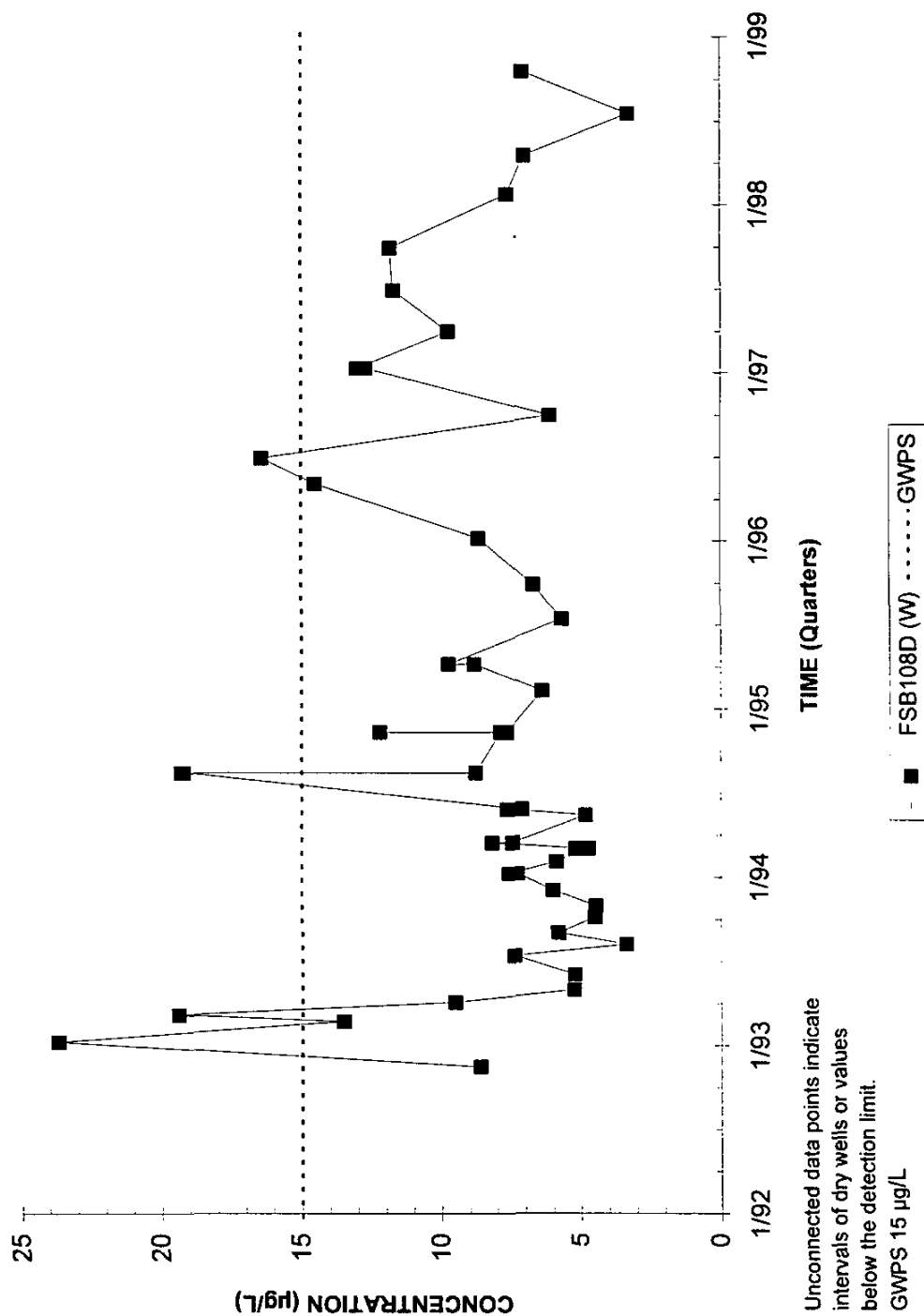
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

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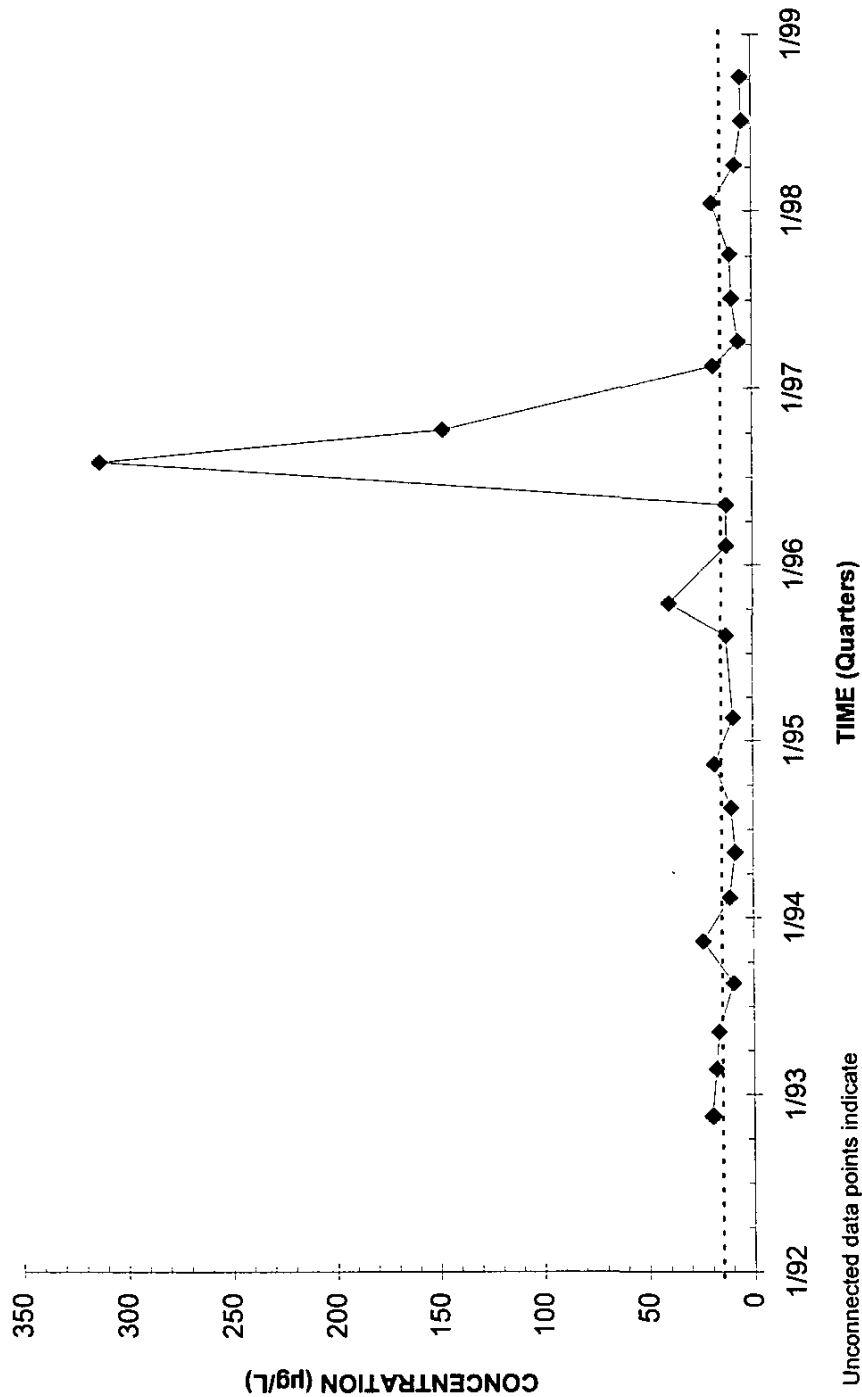
Third and Fourth Quarter 1998

# Lead Concentrations Well FSB108D



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Lead Concentrations Well FSB119D



Unconnected data points indicate  
intervals of dry wells or values  
below the detection limit.

GWPS 15 µg/L

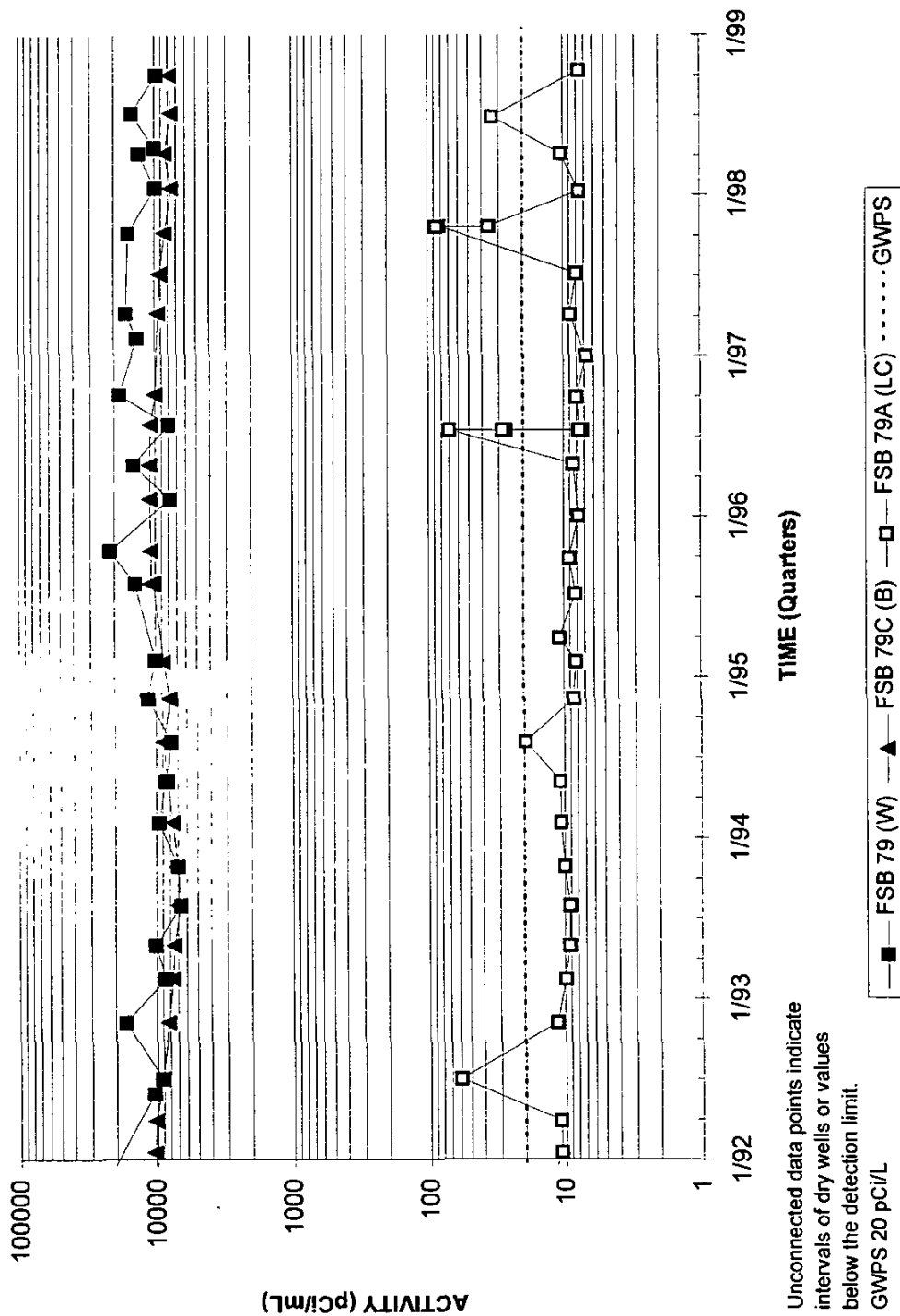
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

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Third and Fourth Quarter 1998

## Tritium Activities Well Cluster FSB 79

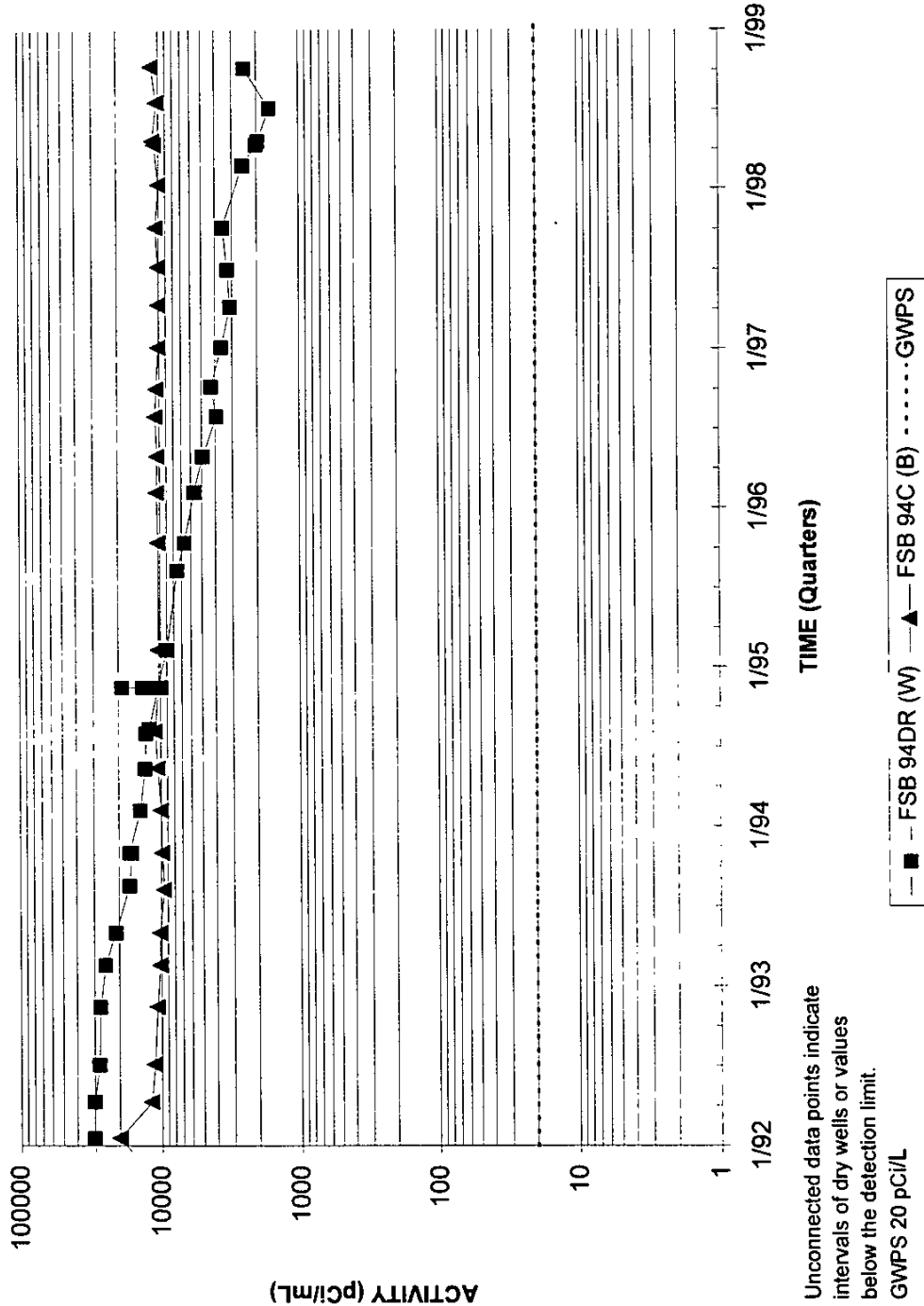


Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 20 pCi/L

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Tritium Activities Well Cluster FSB 94



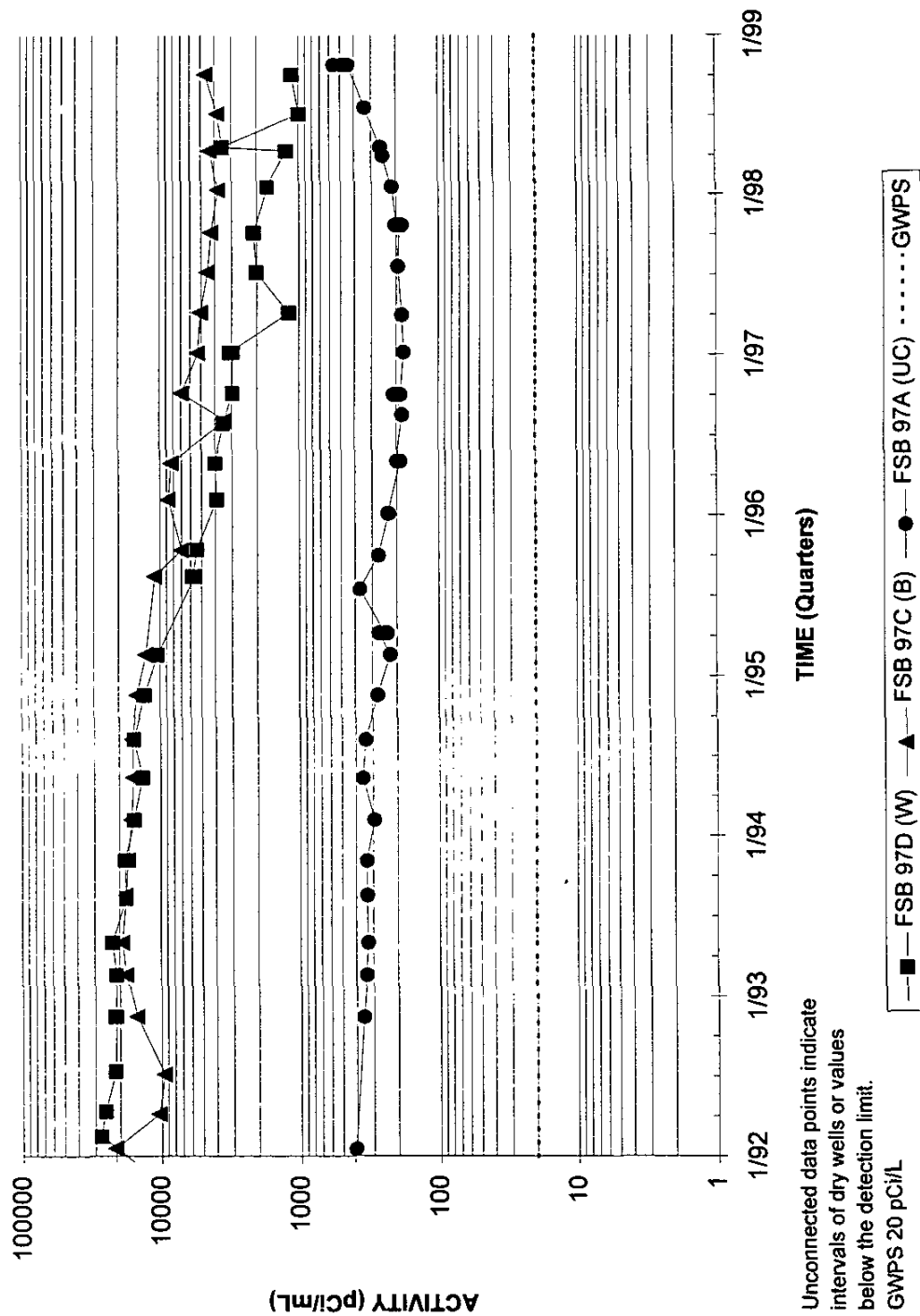
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 22

Third and Fourth Quarter 1998

## Tritium Activities Well Cluster FSB 97



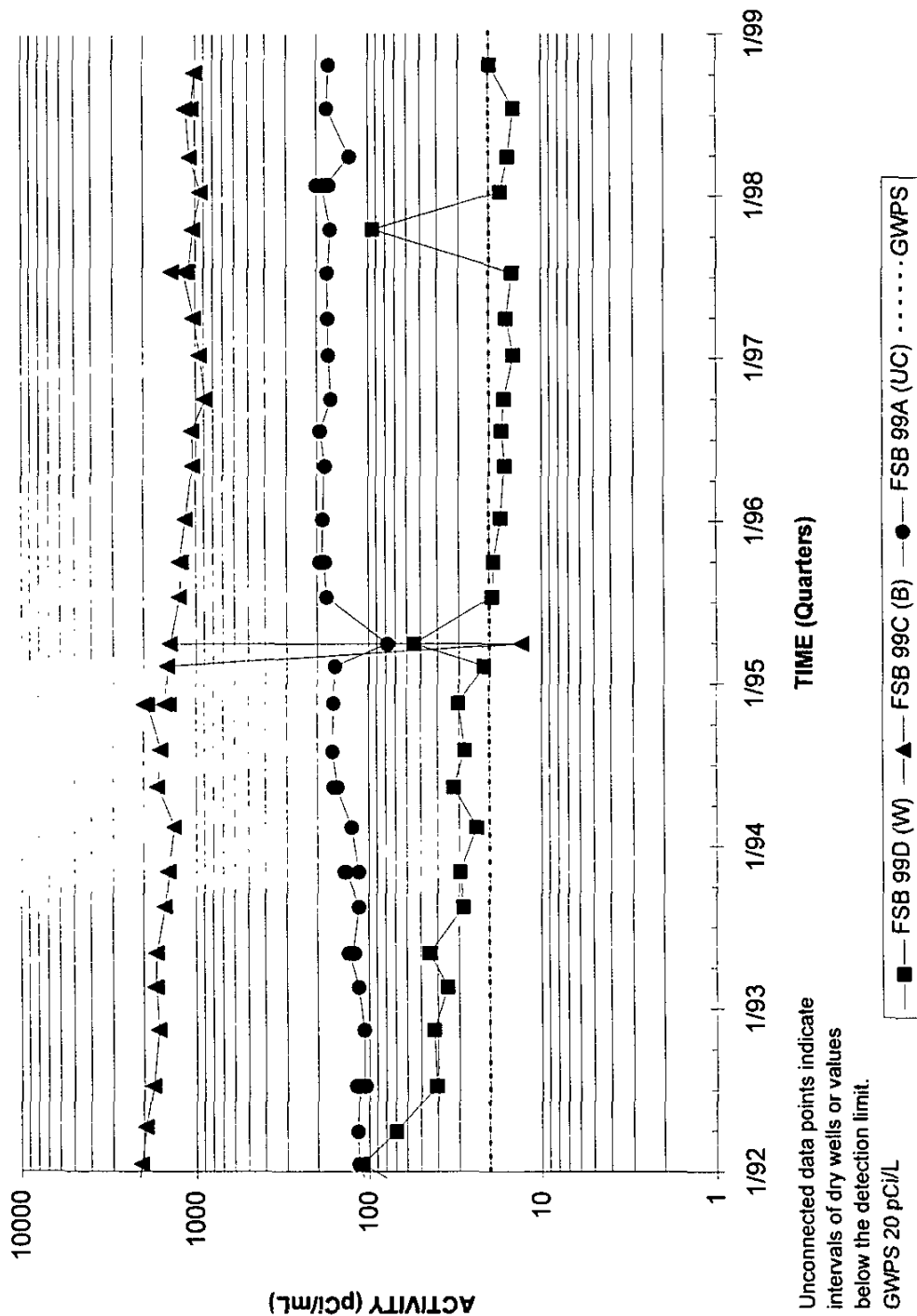
Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 20 pCi/L

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Tritium Activities Well Cluster FSB 99



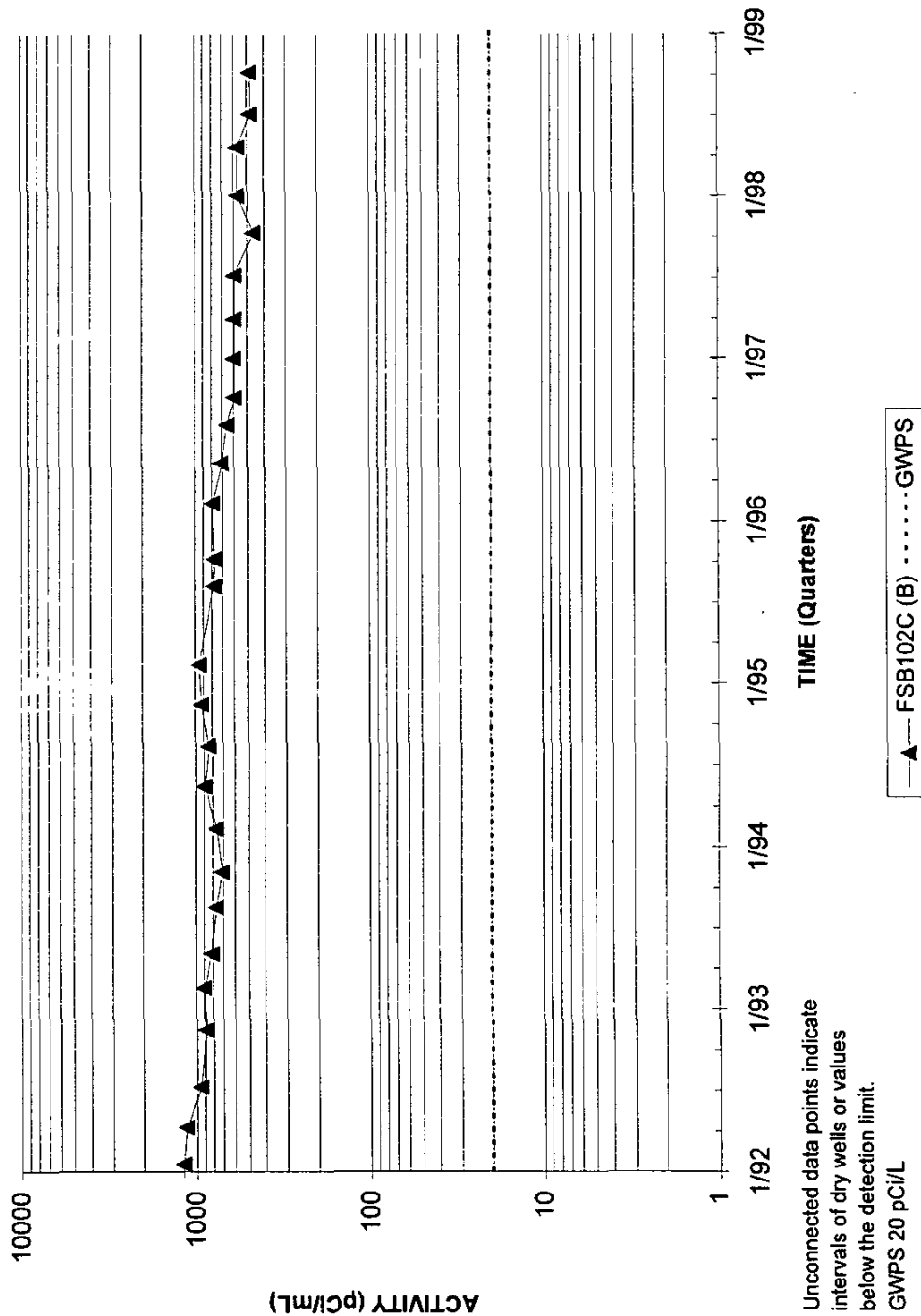
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 24

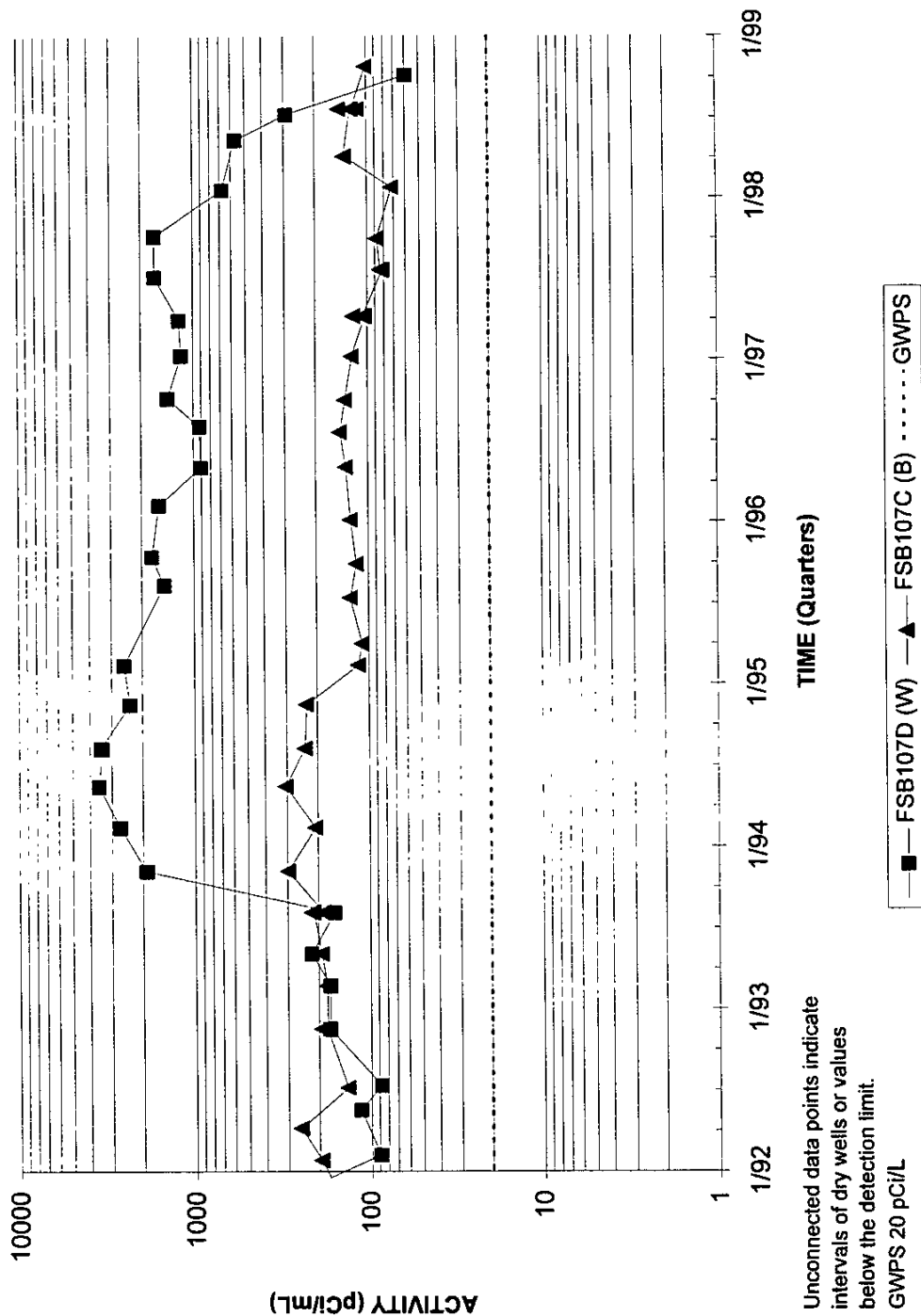
Third and Fourth Quarter 1998

# Tritium Activities Well FSB102C



Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Tritium Activities Well Cluster FSB107



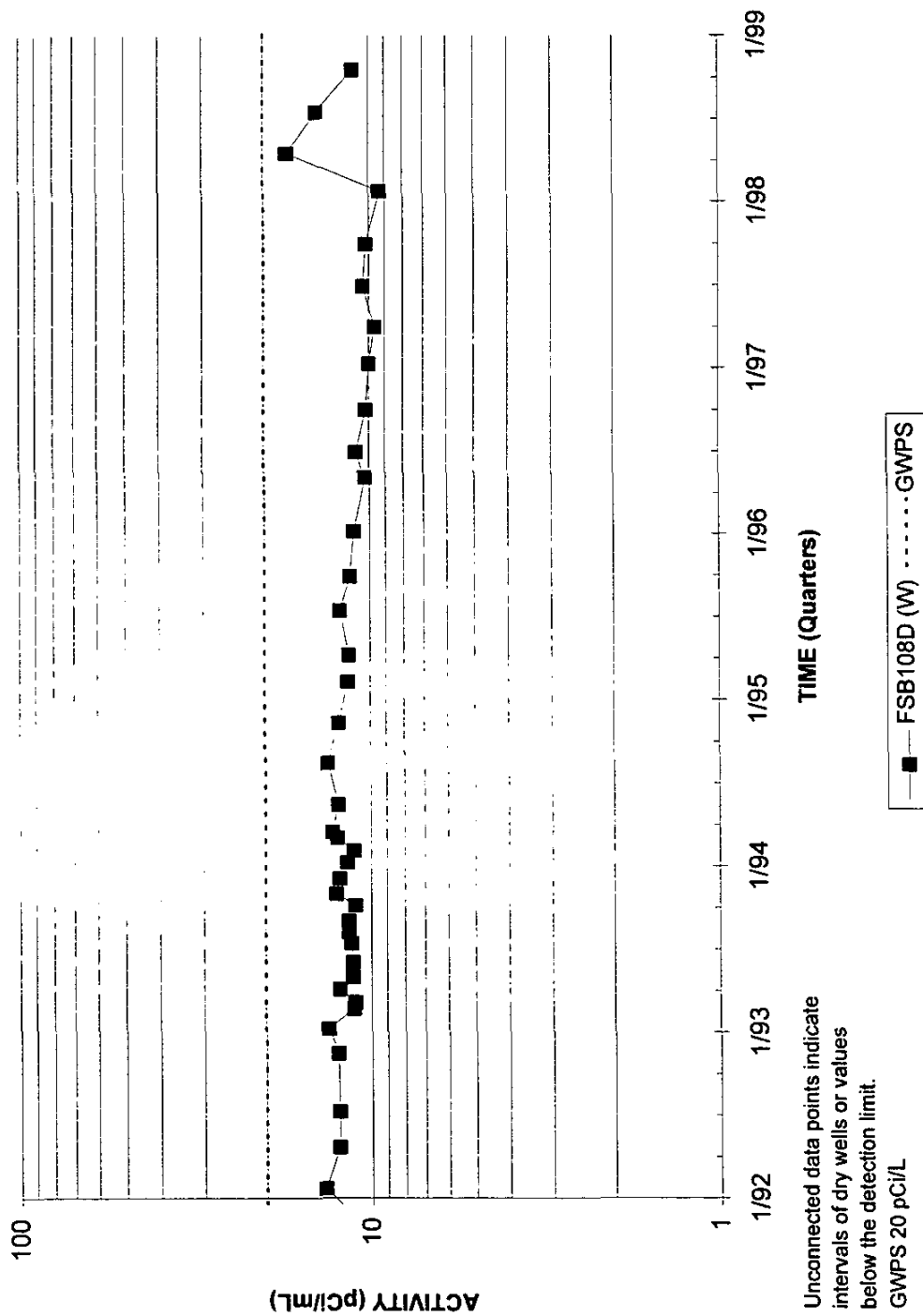
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 26

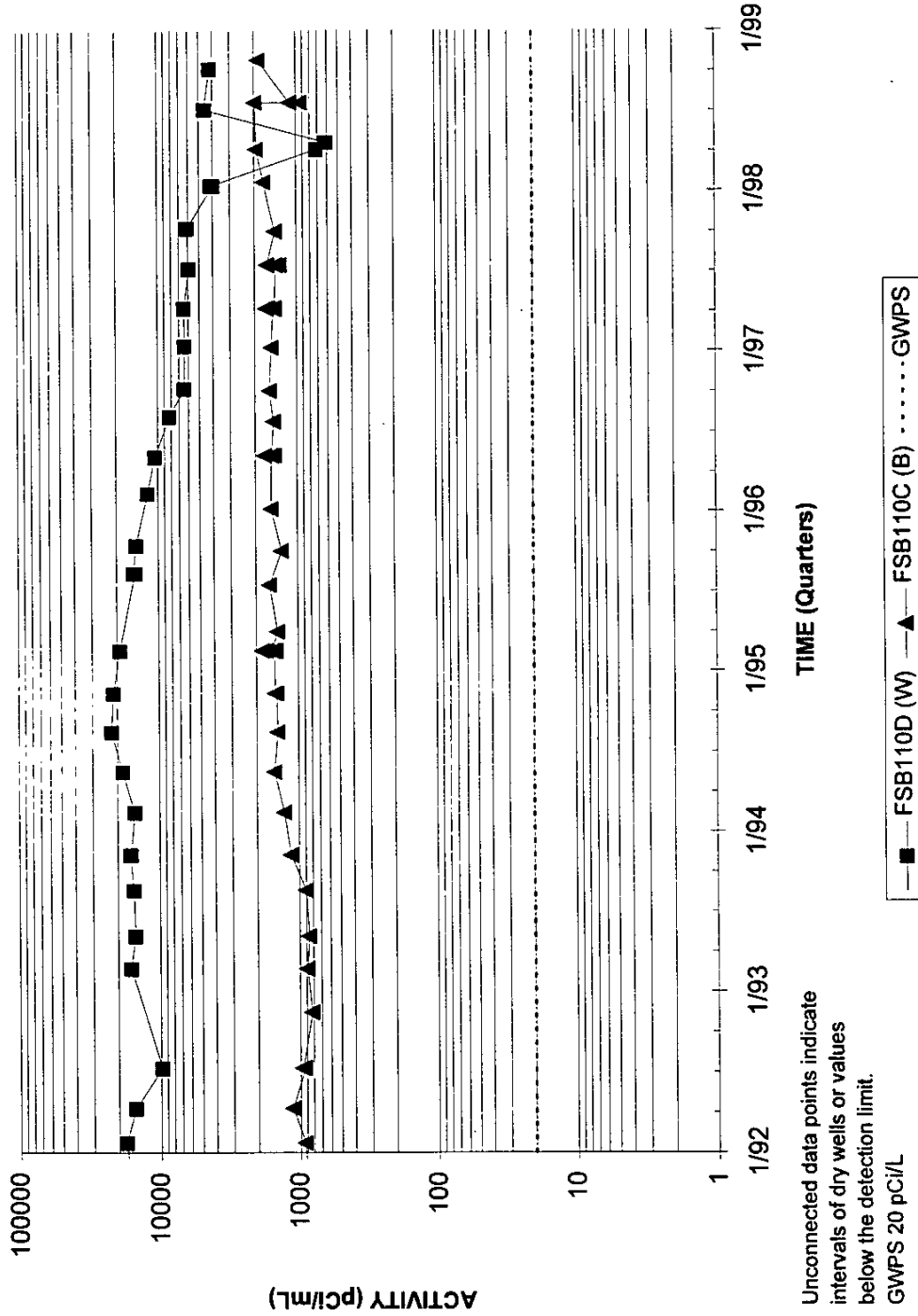
Third and Fourth Quarter 1998

## Tritium Activities Well FSB108D



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Tritium Activities Well Cluster FSB110



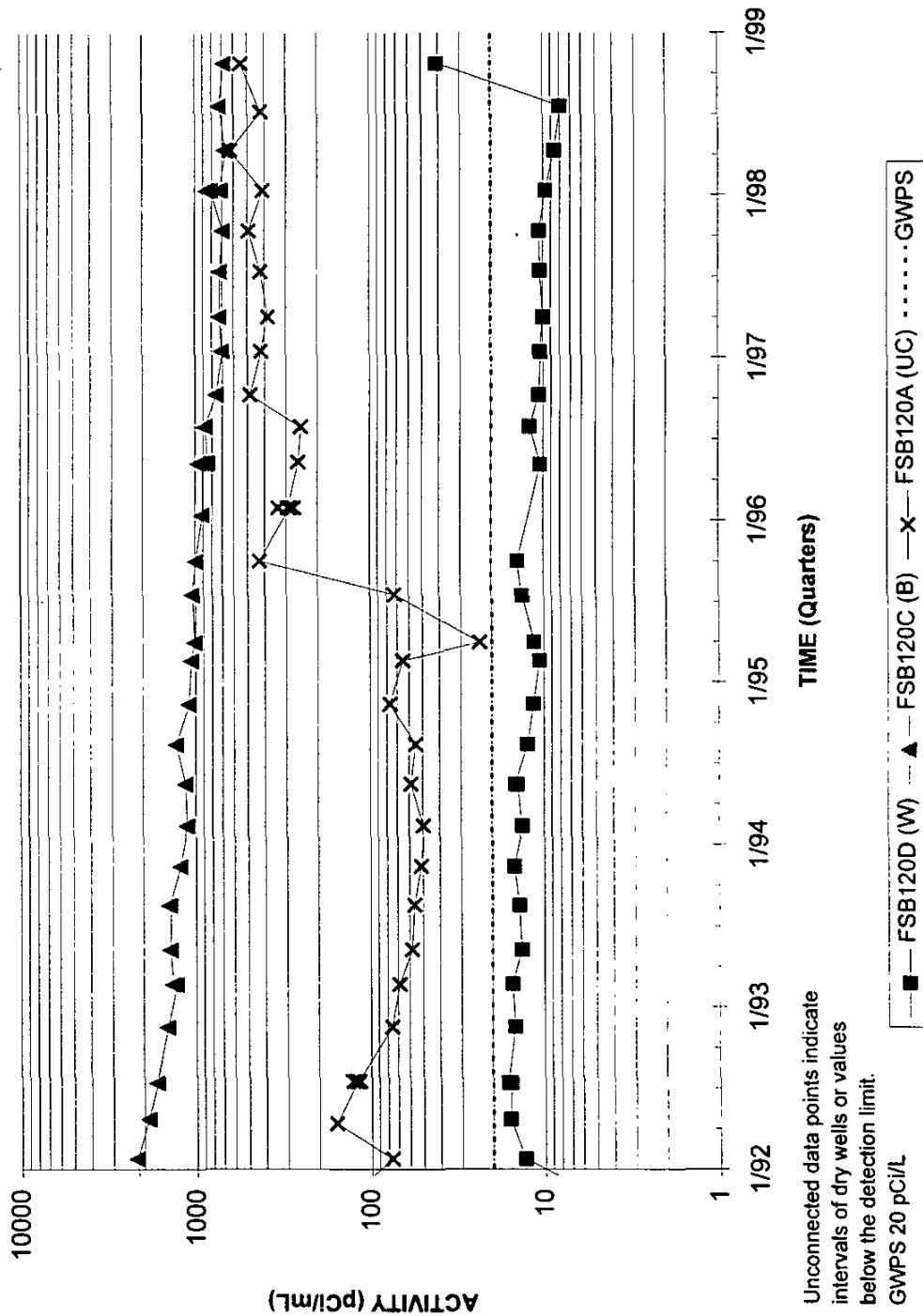
Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IA); MC=Middle Congaree (IA); LC=Lower Congaree (IA)

F-Area HWMF

D - 28

Third and Fourth Quarter 1998

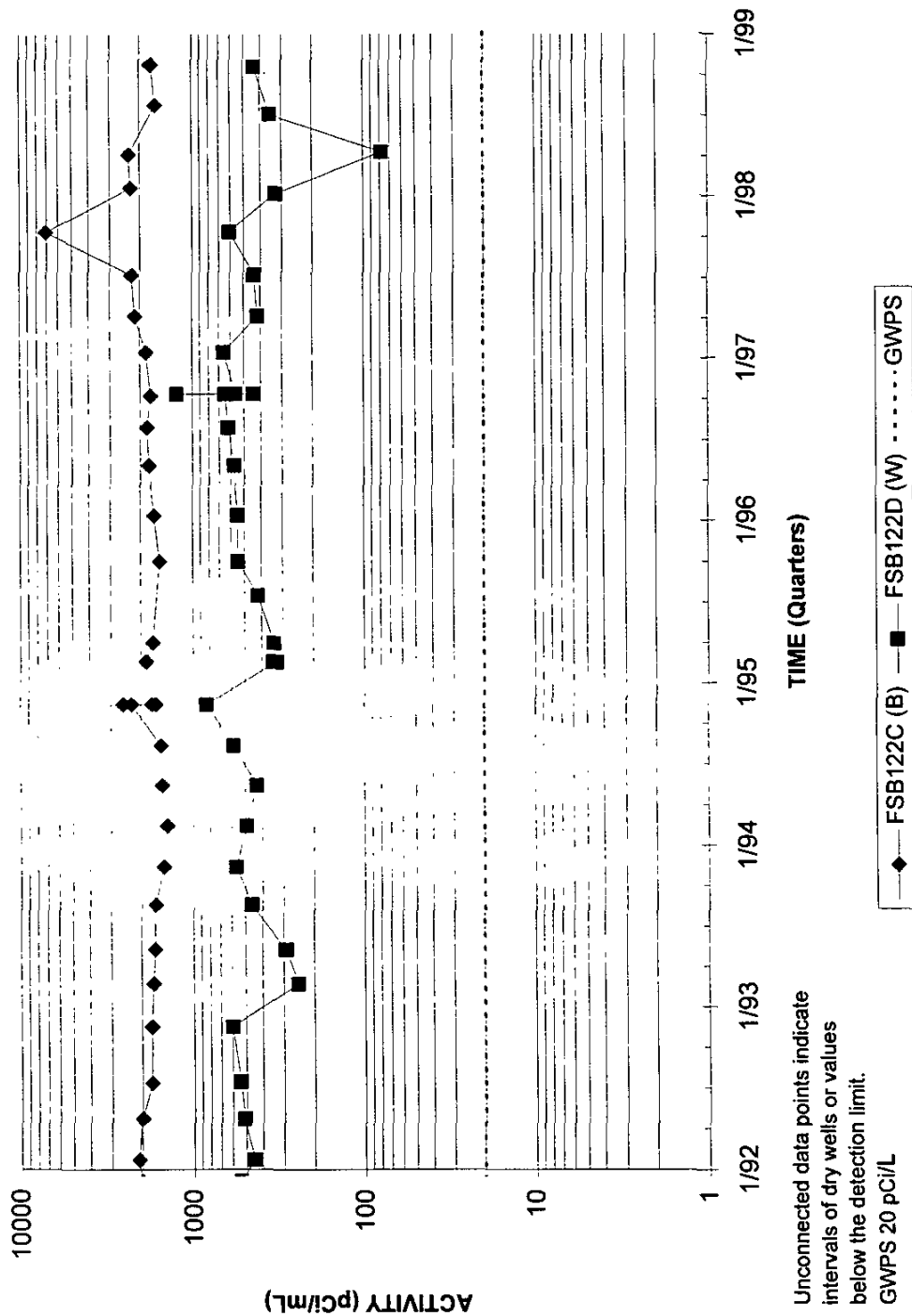
## Tritium Activities Well Cluster FSB120



Unconnected data points indicate intervals of dry wells or values below the detection limit.

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Tritium Activities Well Cluster FSB122



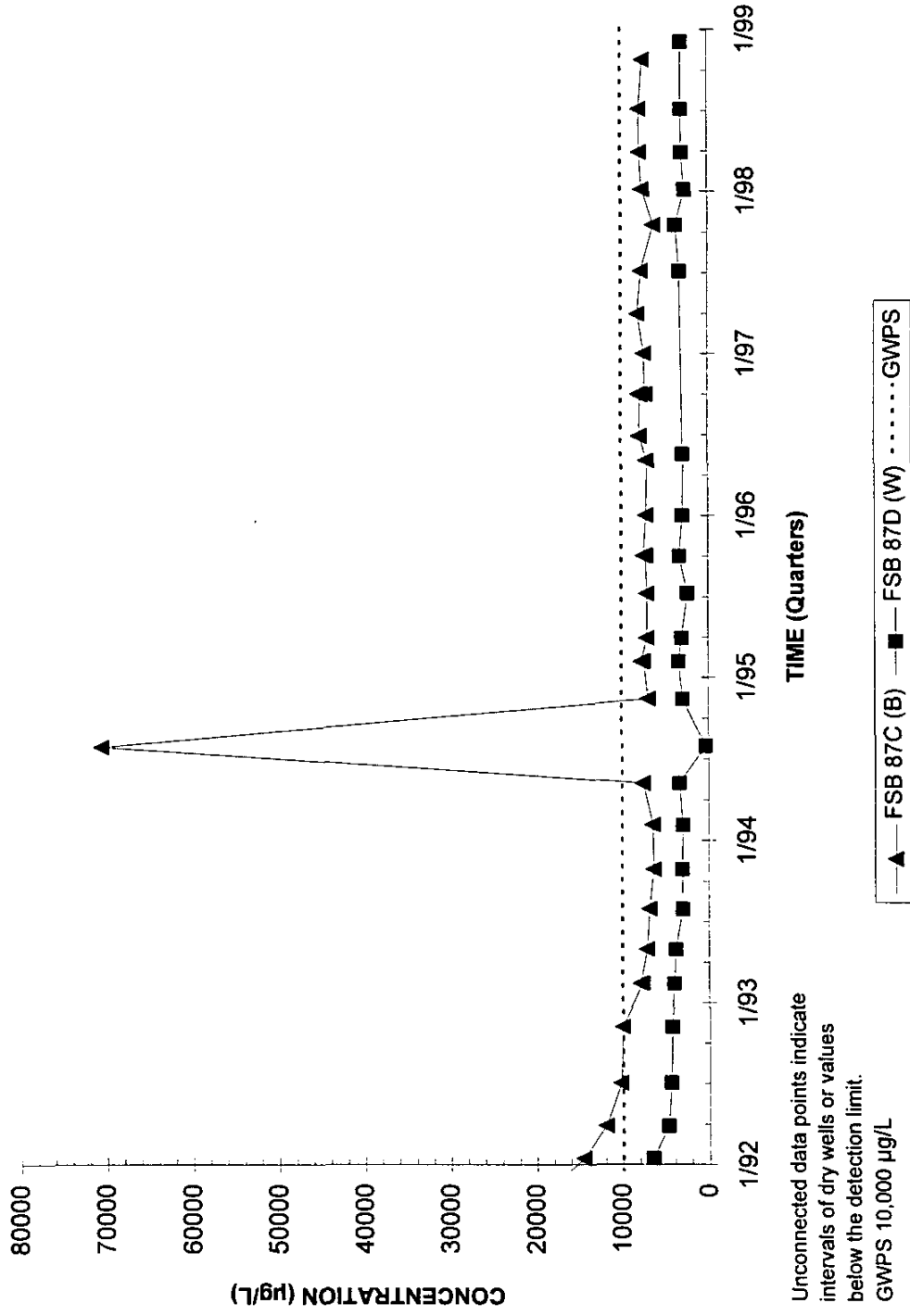
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D-30

Third and Fourth Quarter 1998

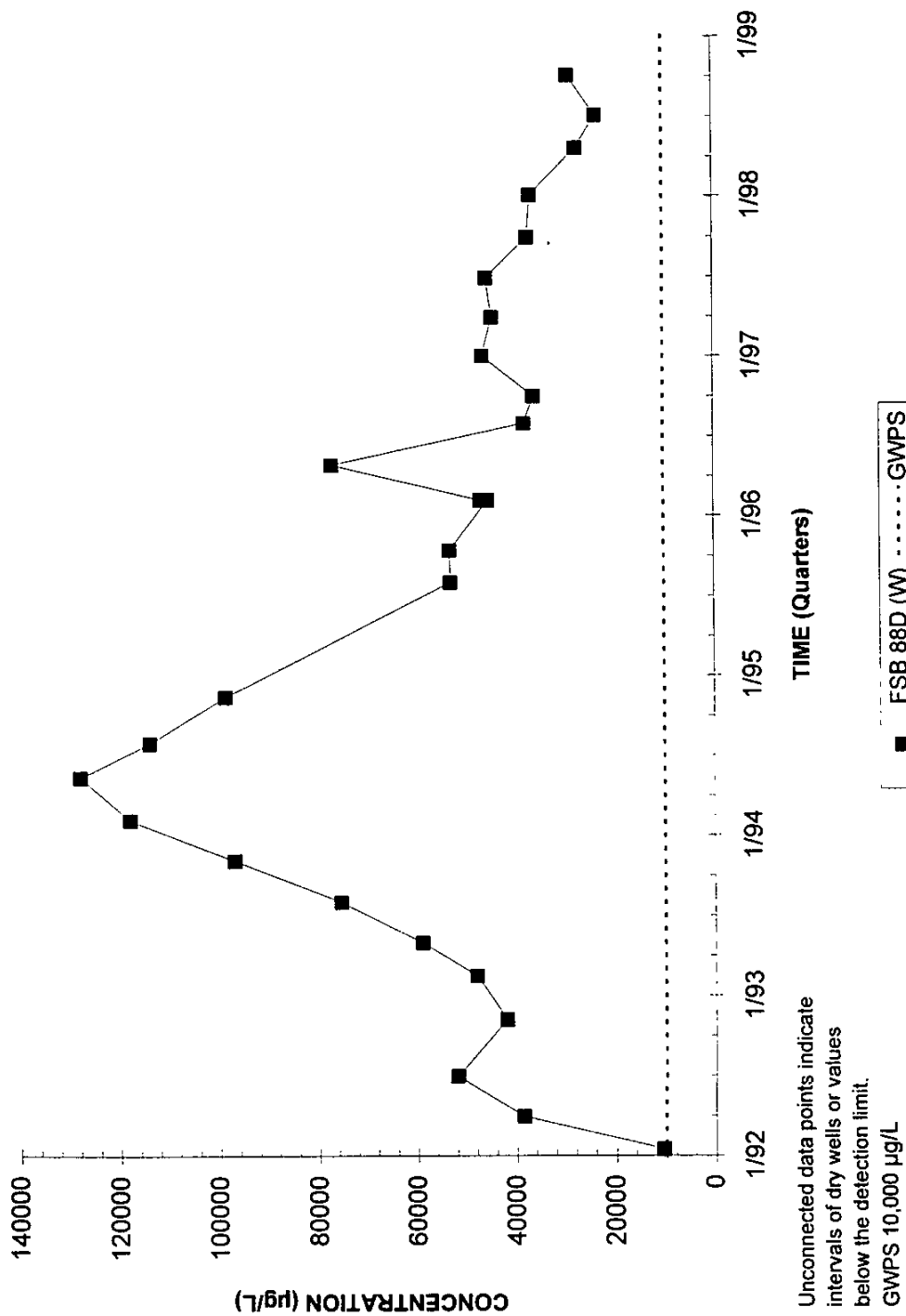
## Nitrate Concentrations Well Cluster FSB 87



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Nitrate Concentrations Well FSB 88D



Unconnected data points indicate intervals of dry wells or values below the detection limit.  
GWPS 10,000 µg/L

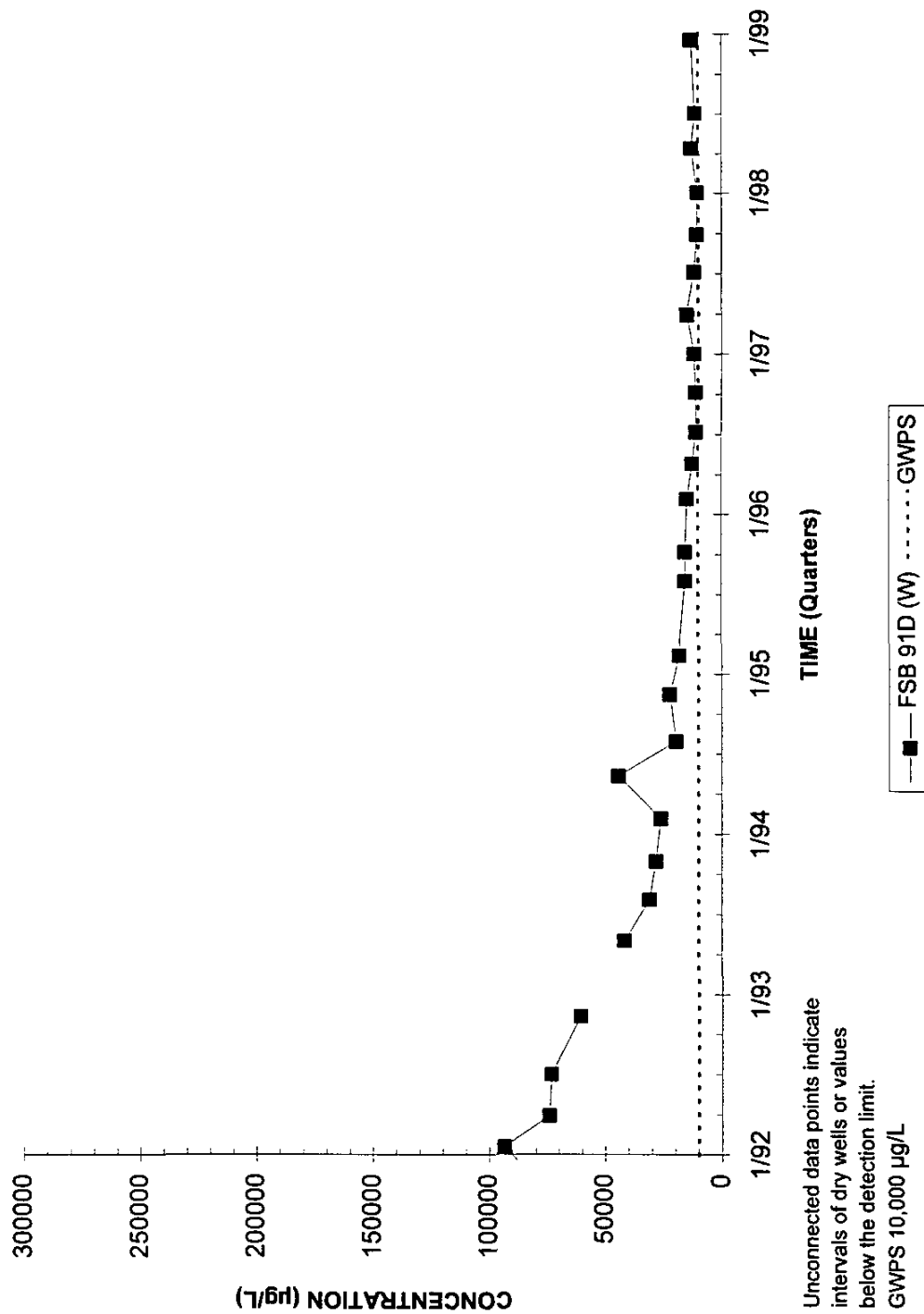
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 32

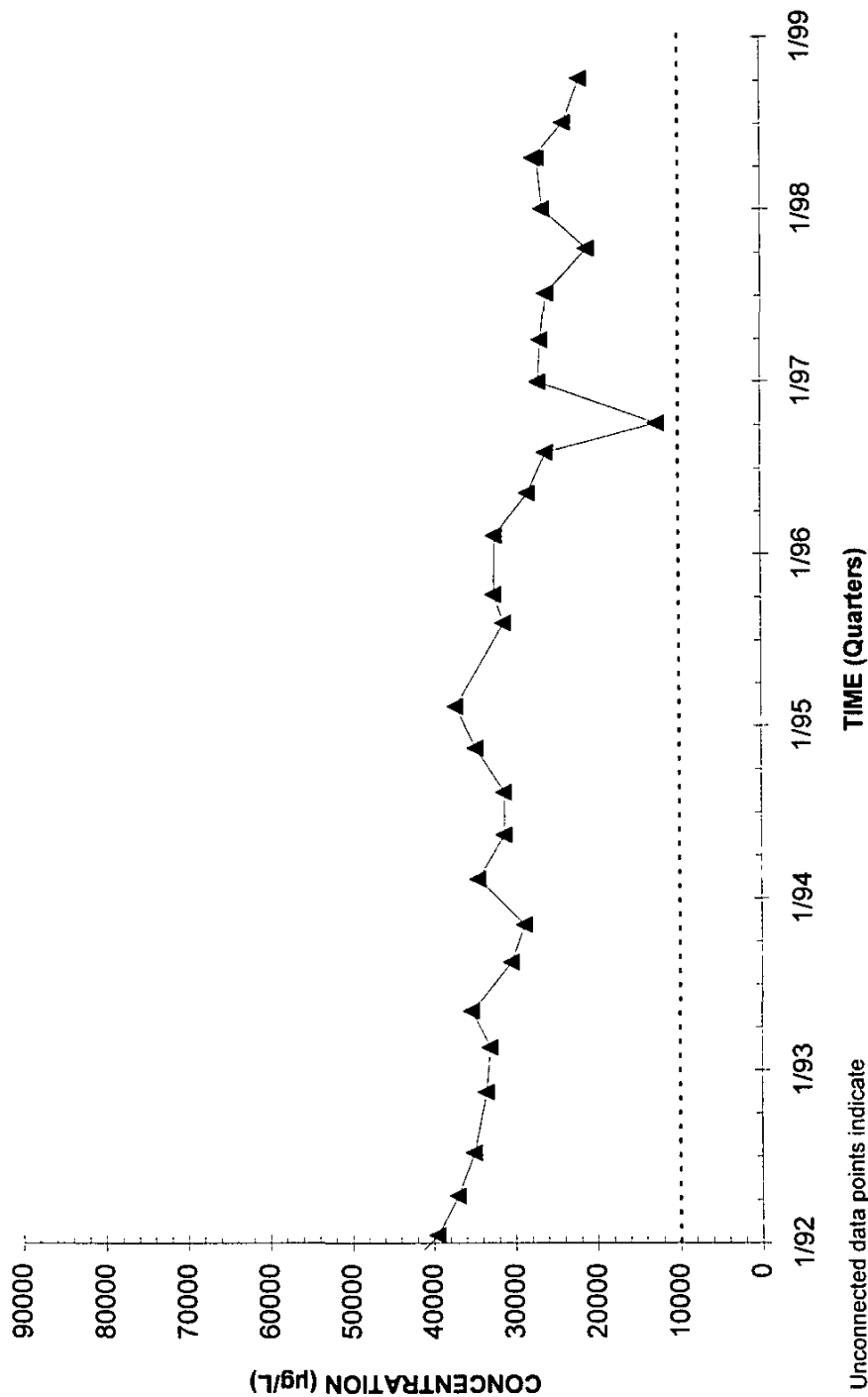
Third and Fourth Quarter 1998

## Nitrate Concentrations Well FSB 91D



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Nitrate Concentrations Well FSB102C



Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 10,000 µg/L

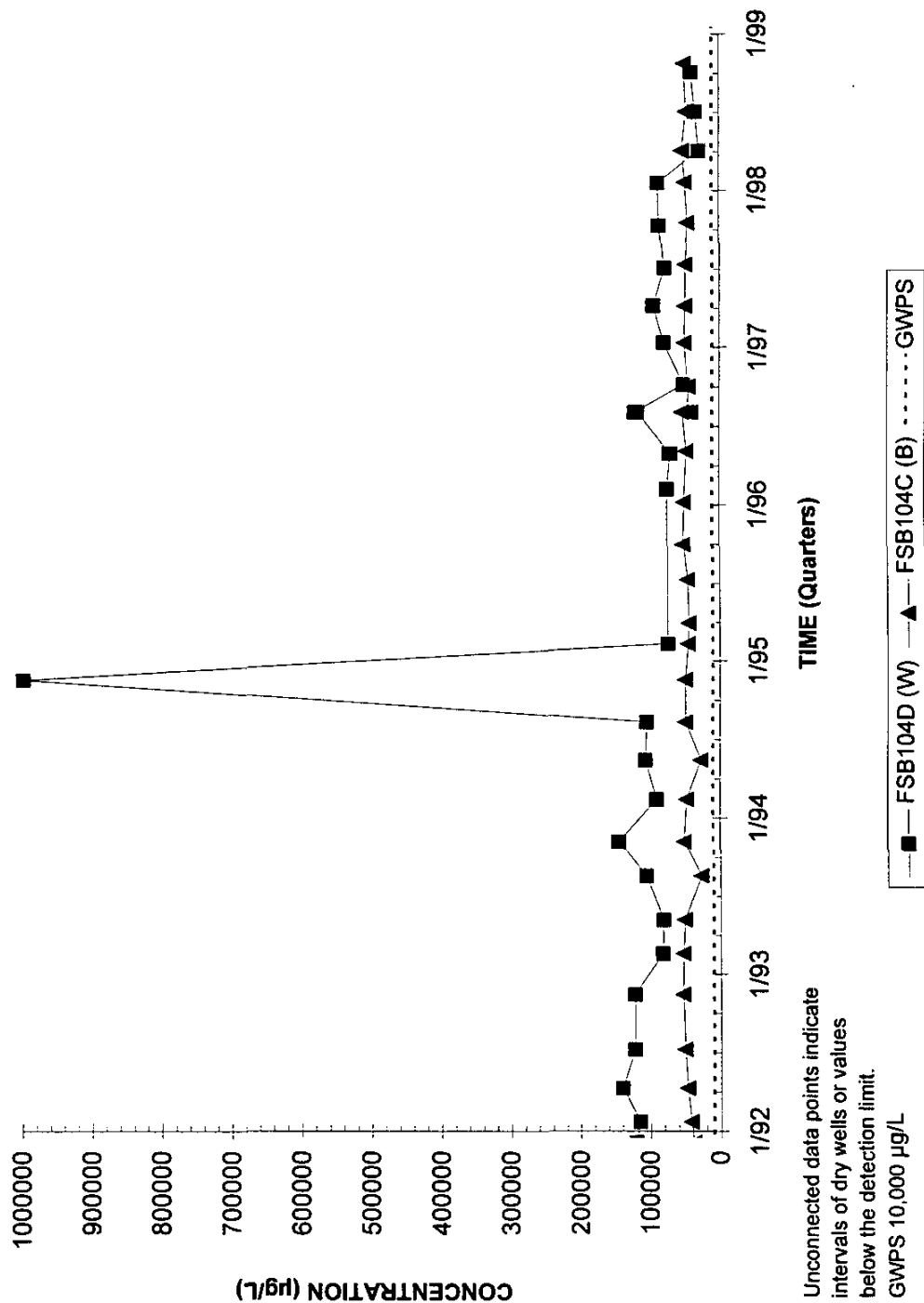
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 34

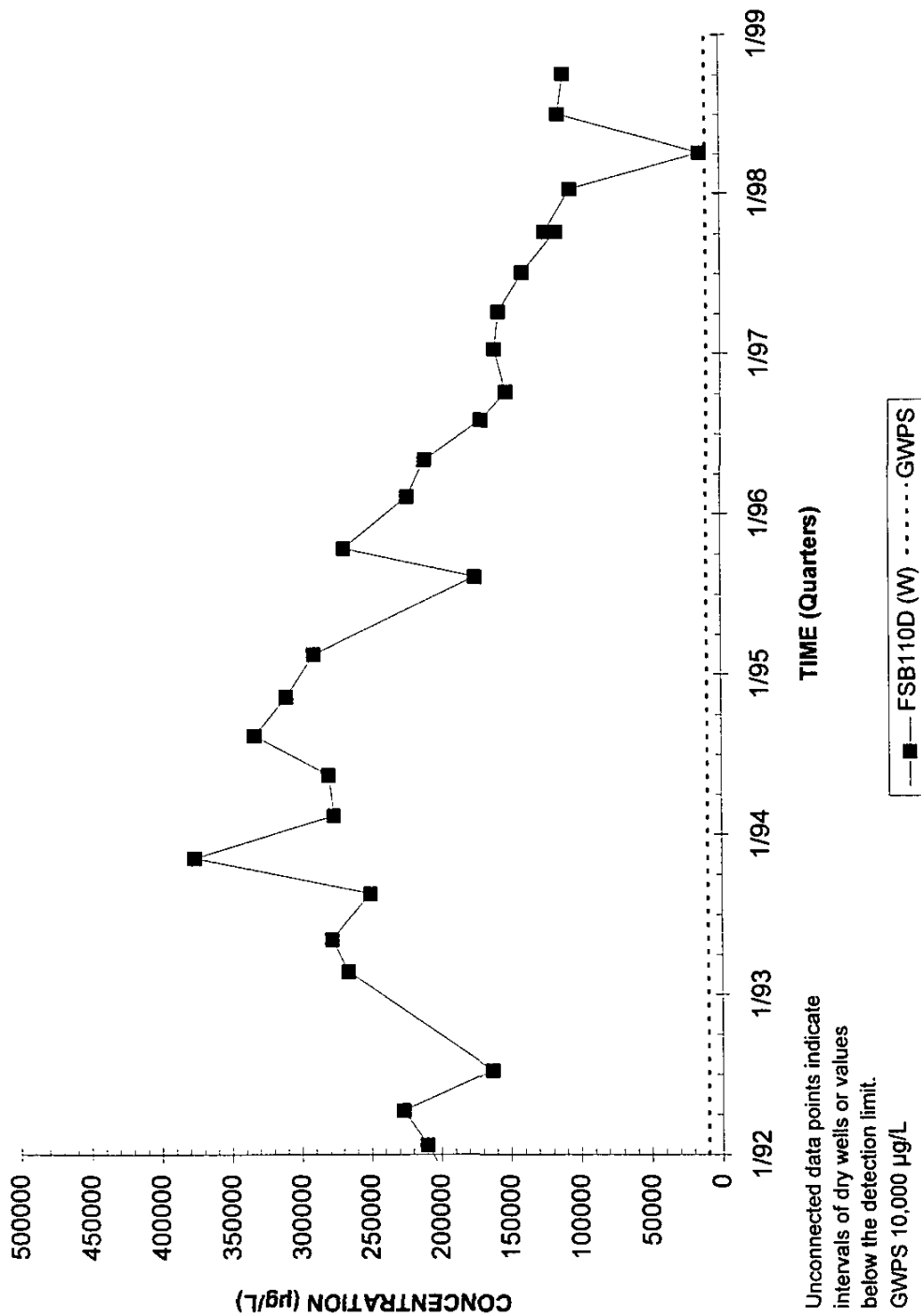
Third and Fourth Quarter 1998

# Nitrate Concentrations Well Cluster FSB104



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Nitrate Concentrations Well FSB110D



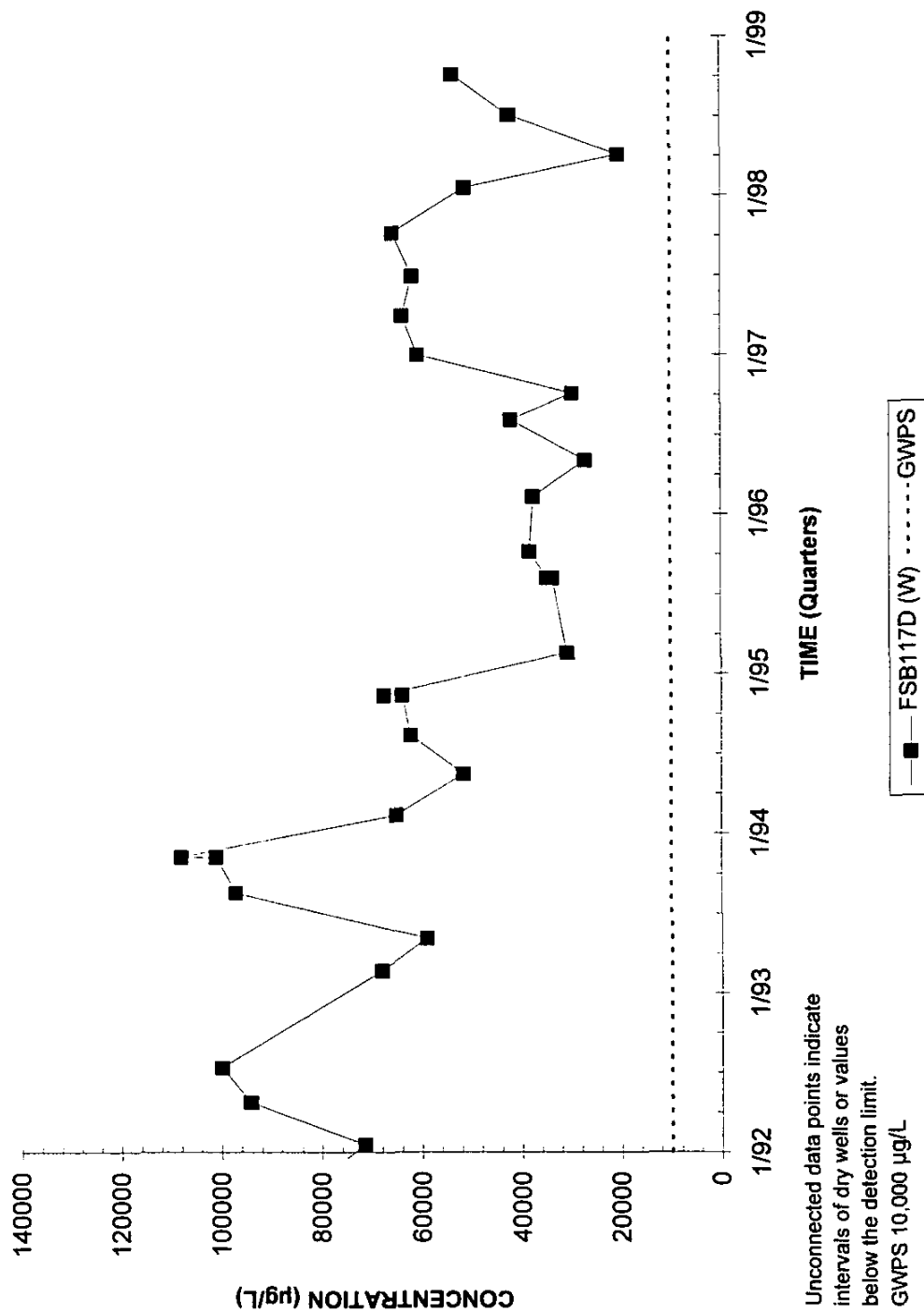
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 36

Third and Fourth Quarter 1998

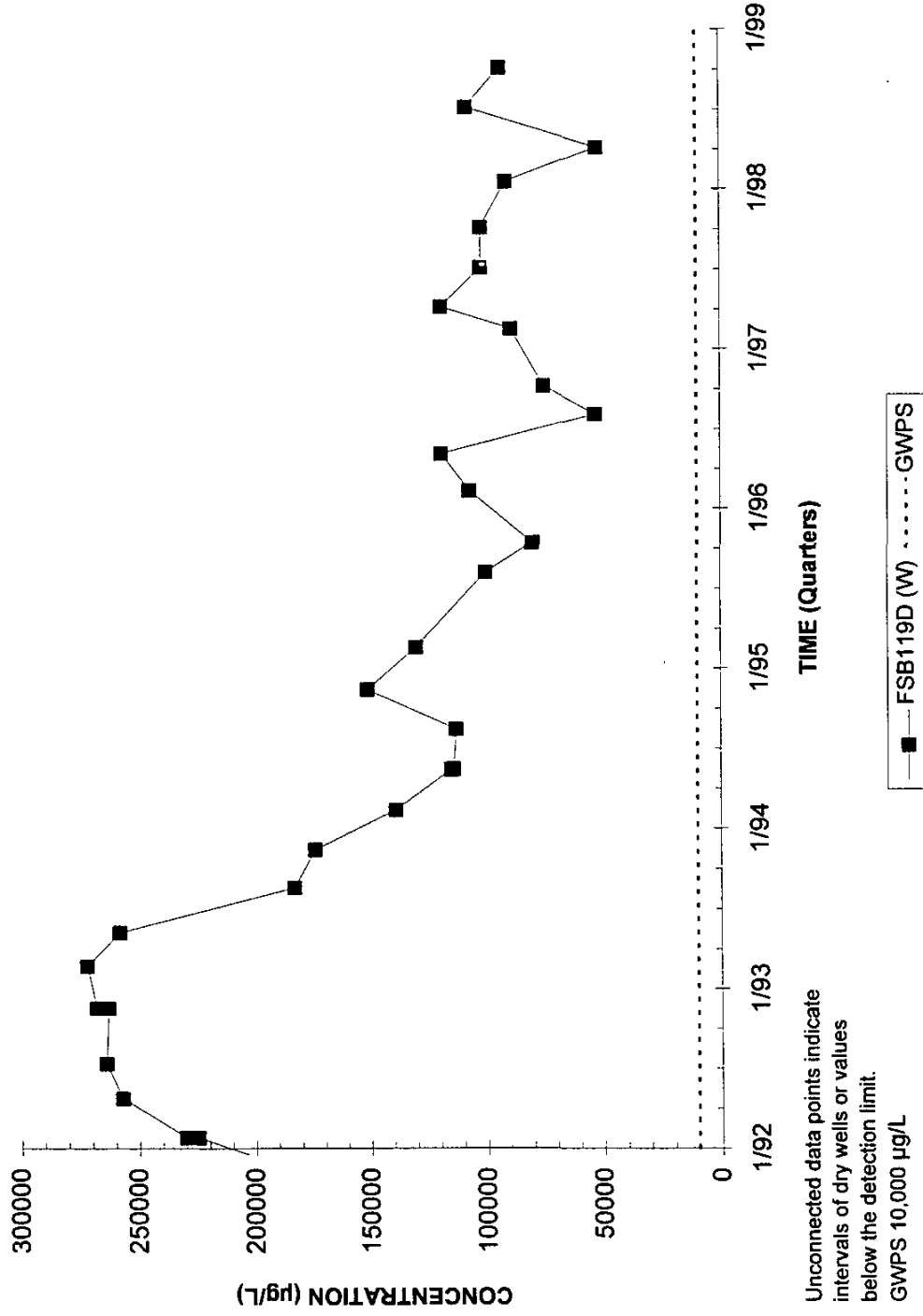
## Nitrate Concentrations Well FSB117D



Unconnected data points indicate intervals of dry wells or values below the detection limit.  
GWPS 10,000 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Nitrate Concentrations Well FSB119D



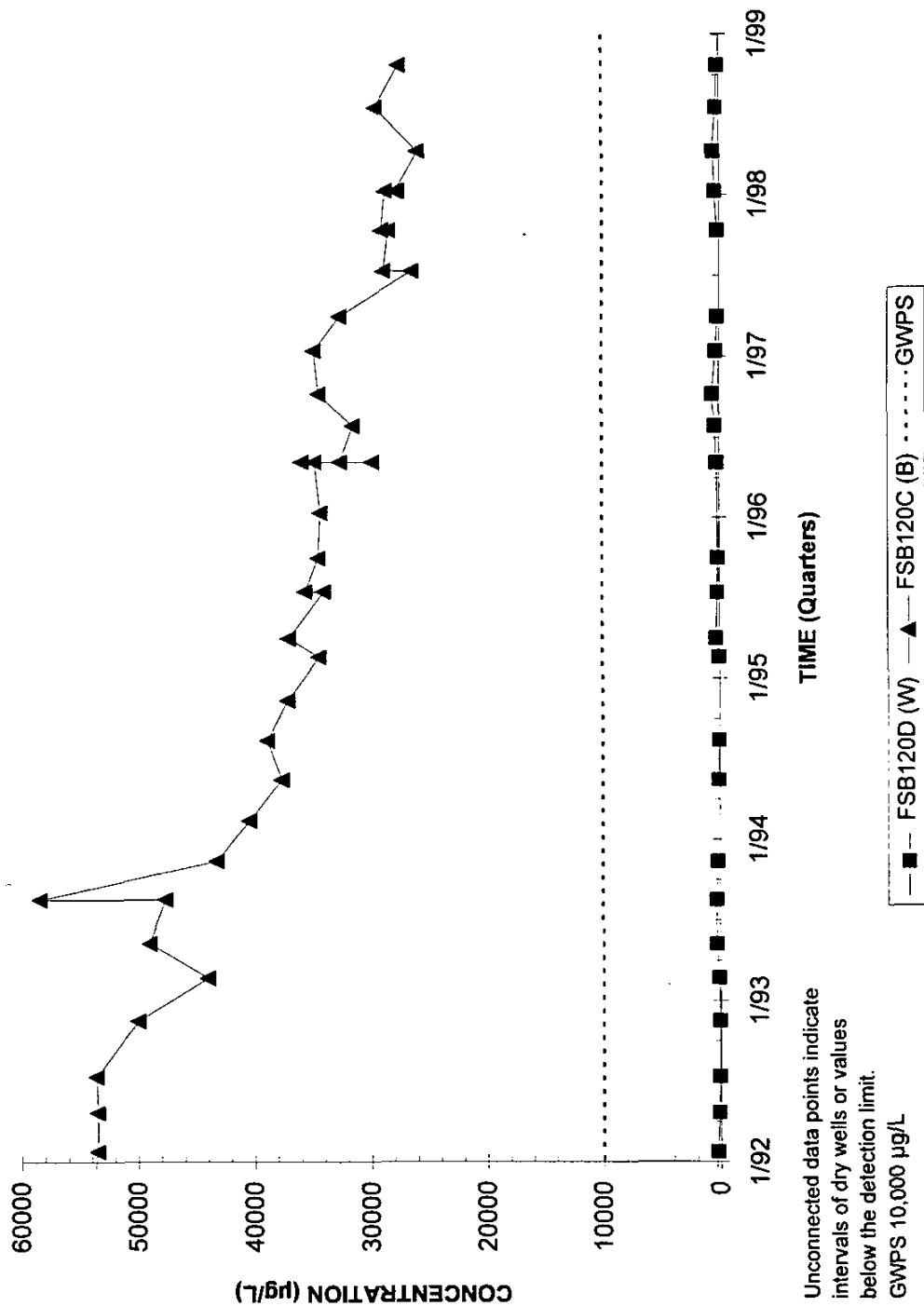
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 38

Third and Fourth Quarter 1998

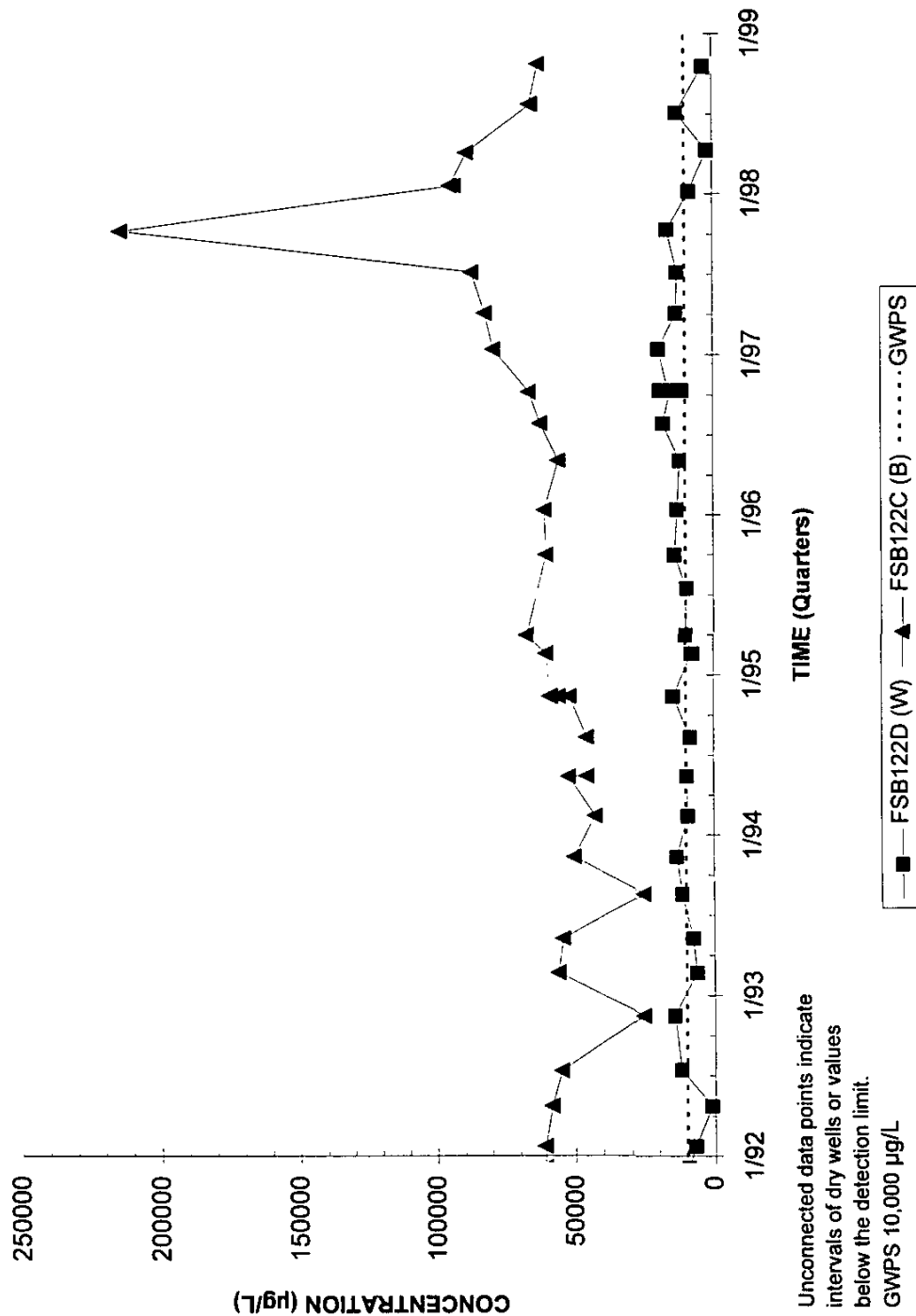
## Nitrate Concentrations Well Cluster FSB120



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Nitrate Concentrations Well Cluster FSB122



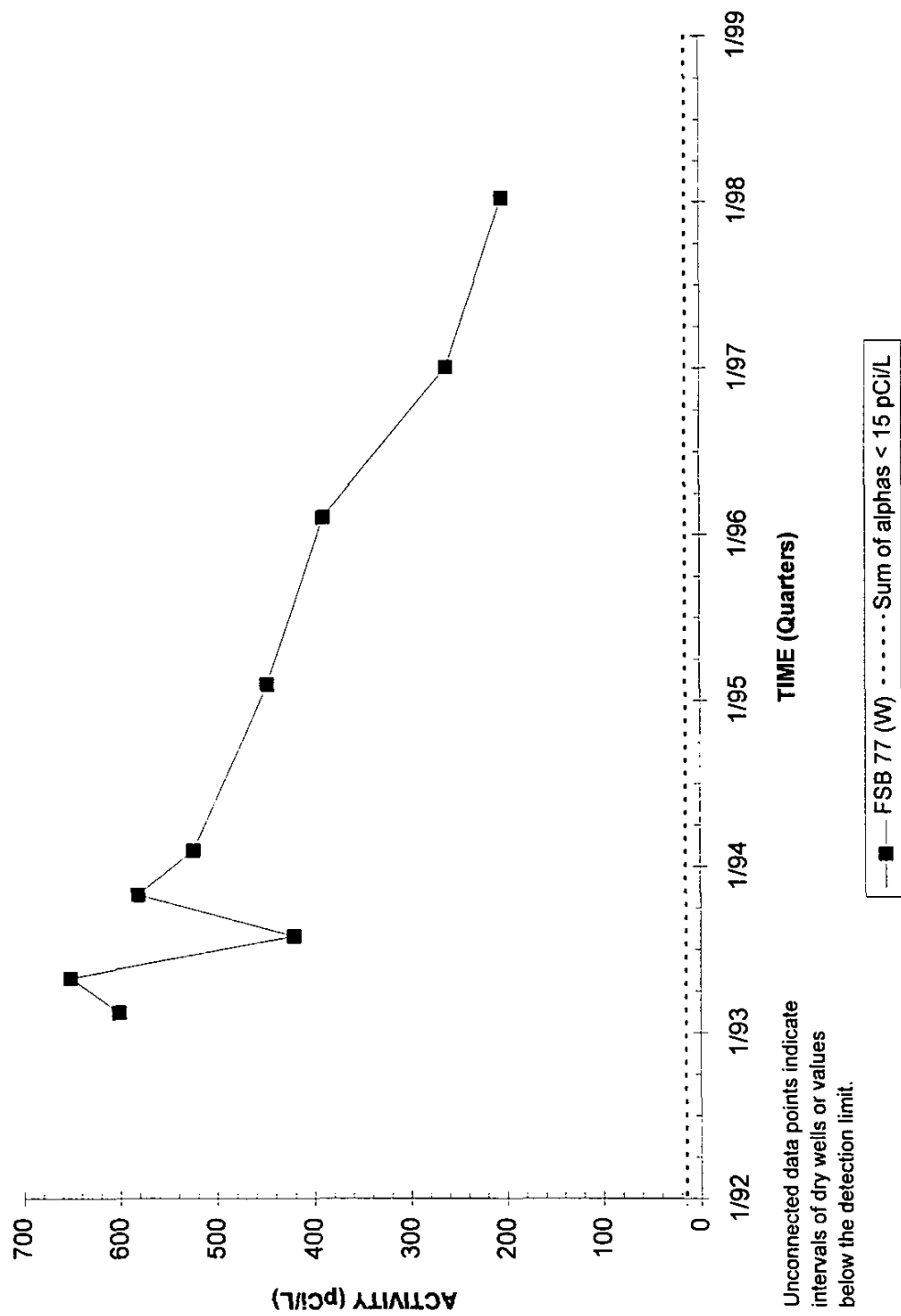
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 40

Third and Fourth Quarter 1998

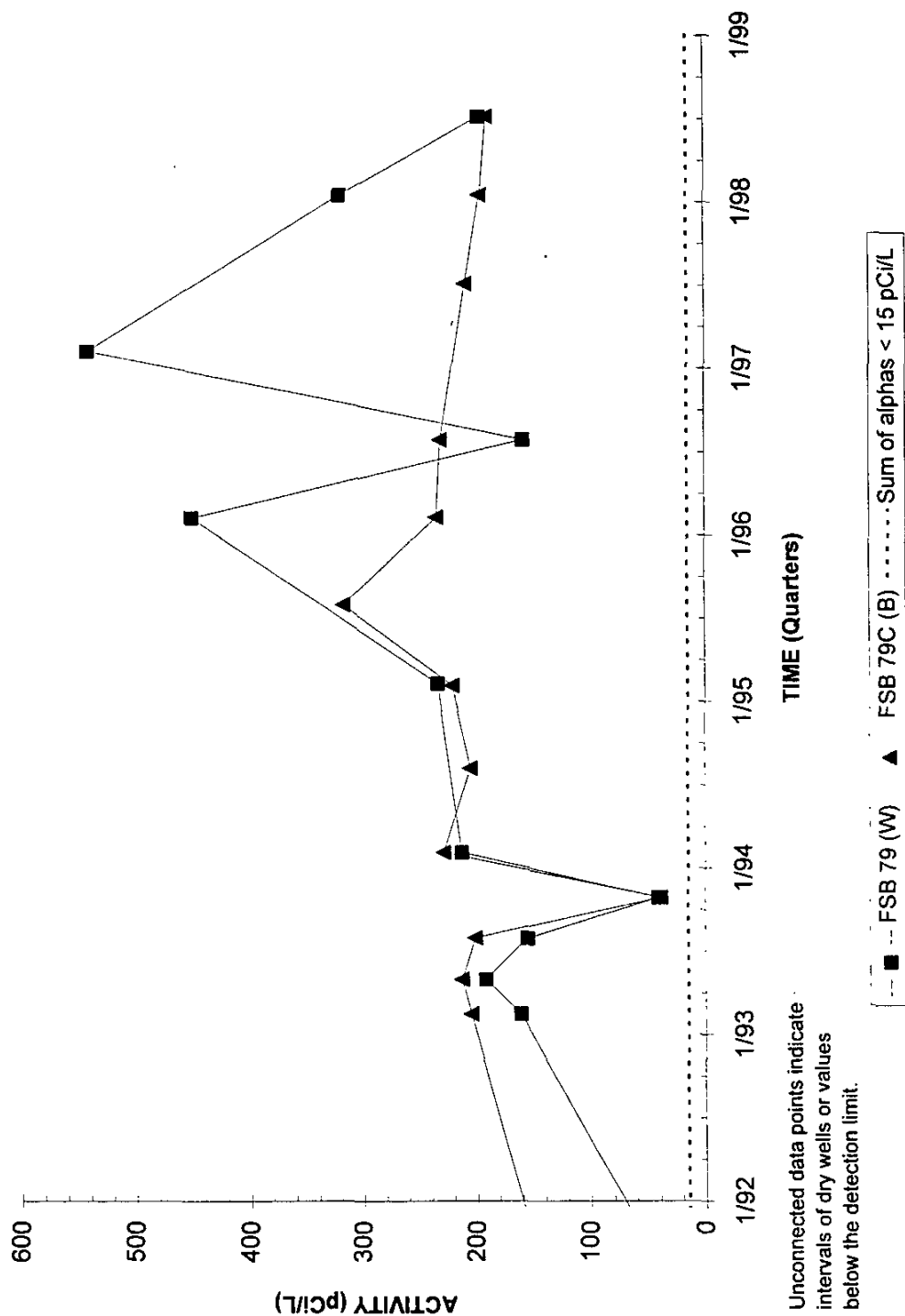
## Uranium-233/234 Activities Well FSB 77



Unconnected data points indicate intervals of dry wells or values below the detection limit.

Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Uranium-233/234 Activities Well Cluster FSB 79



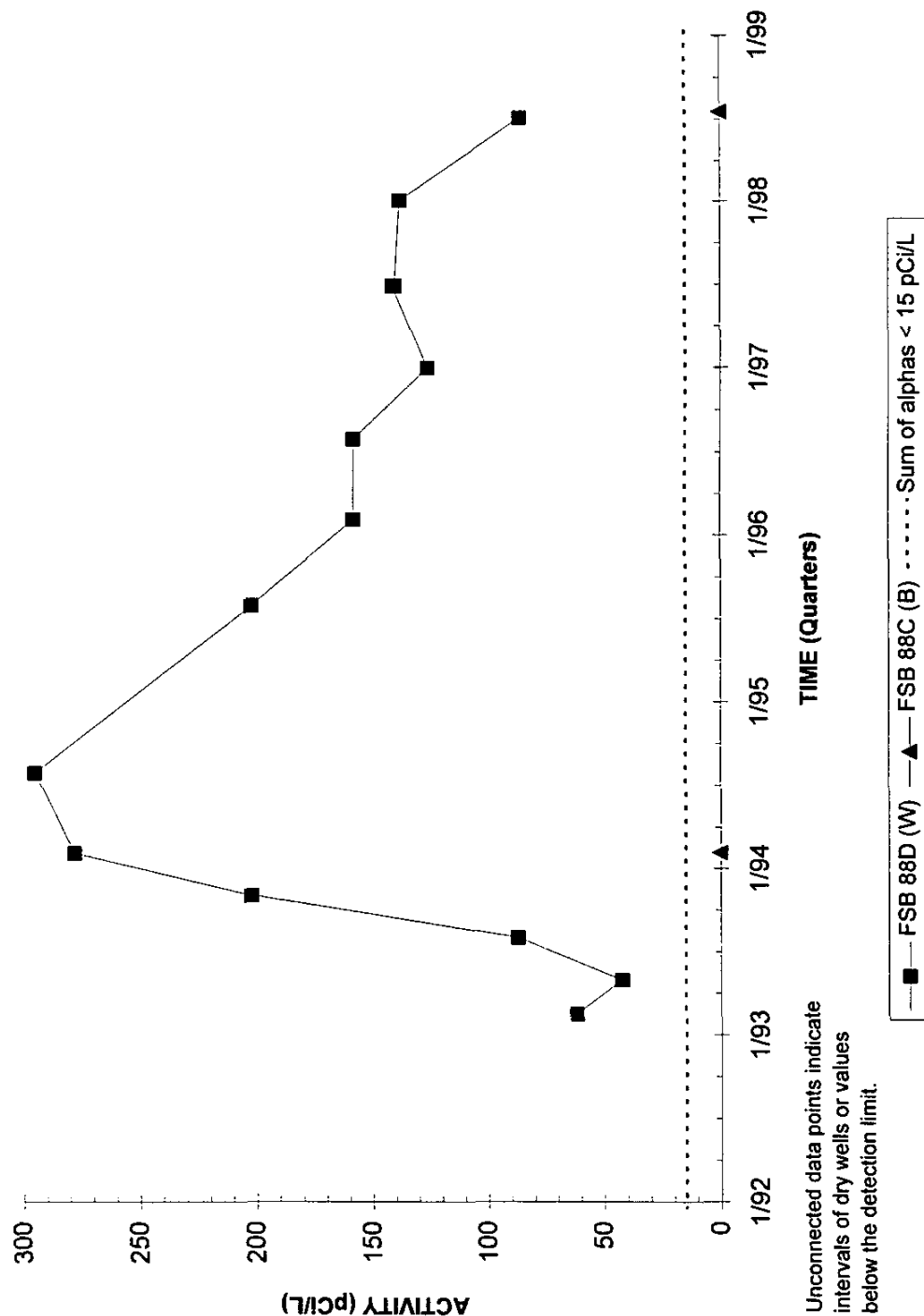
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 42

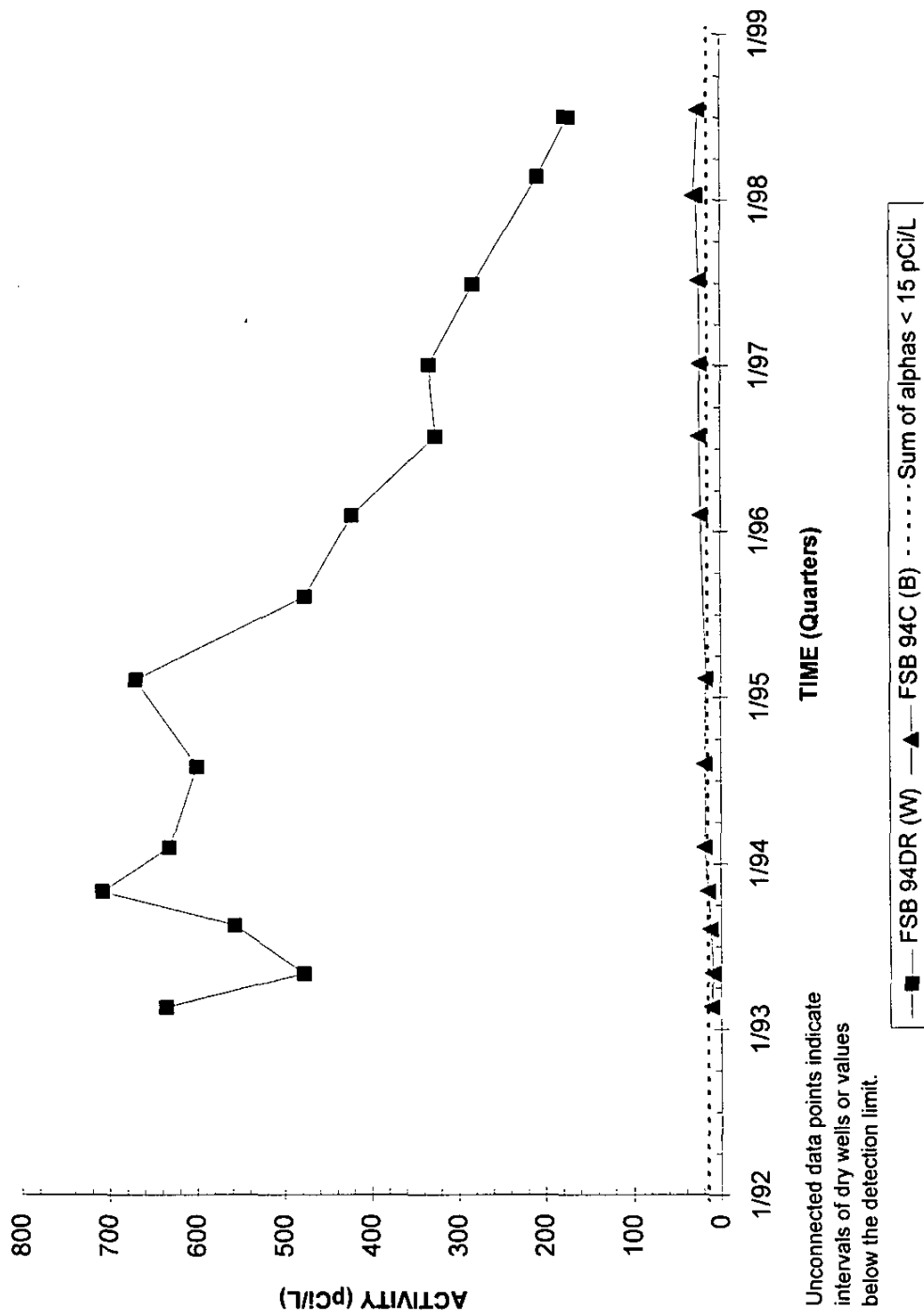
Third and Fourth Quarter 1998

# Uranium-233/234 Activities Well Cluster FSB 88



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Uranium-233/234 Activities Well Cluster FSB 94



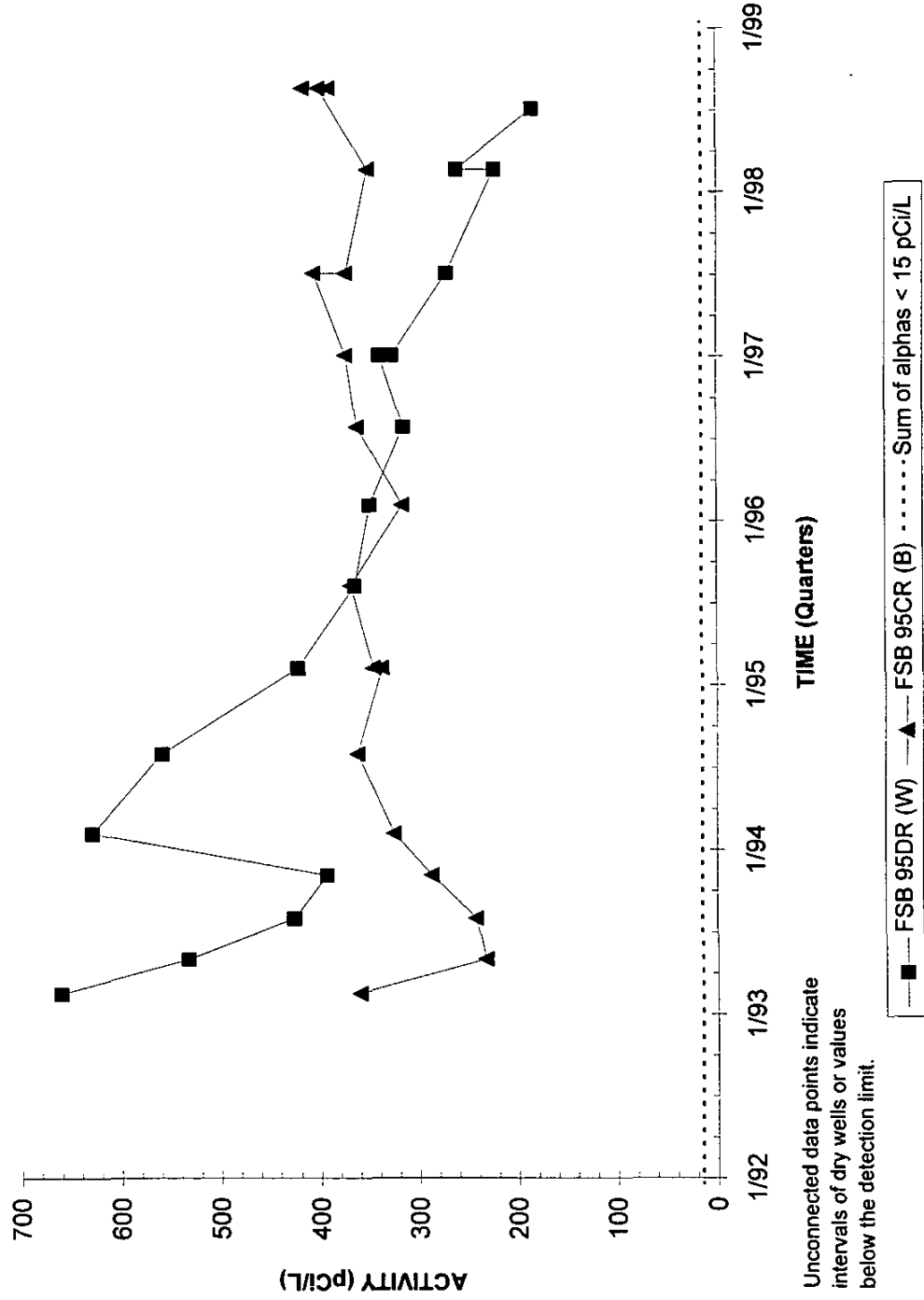
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 44

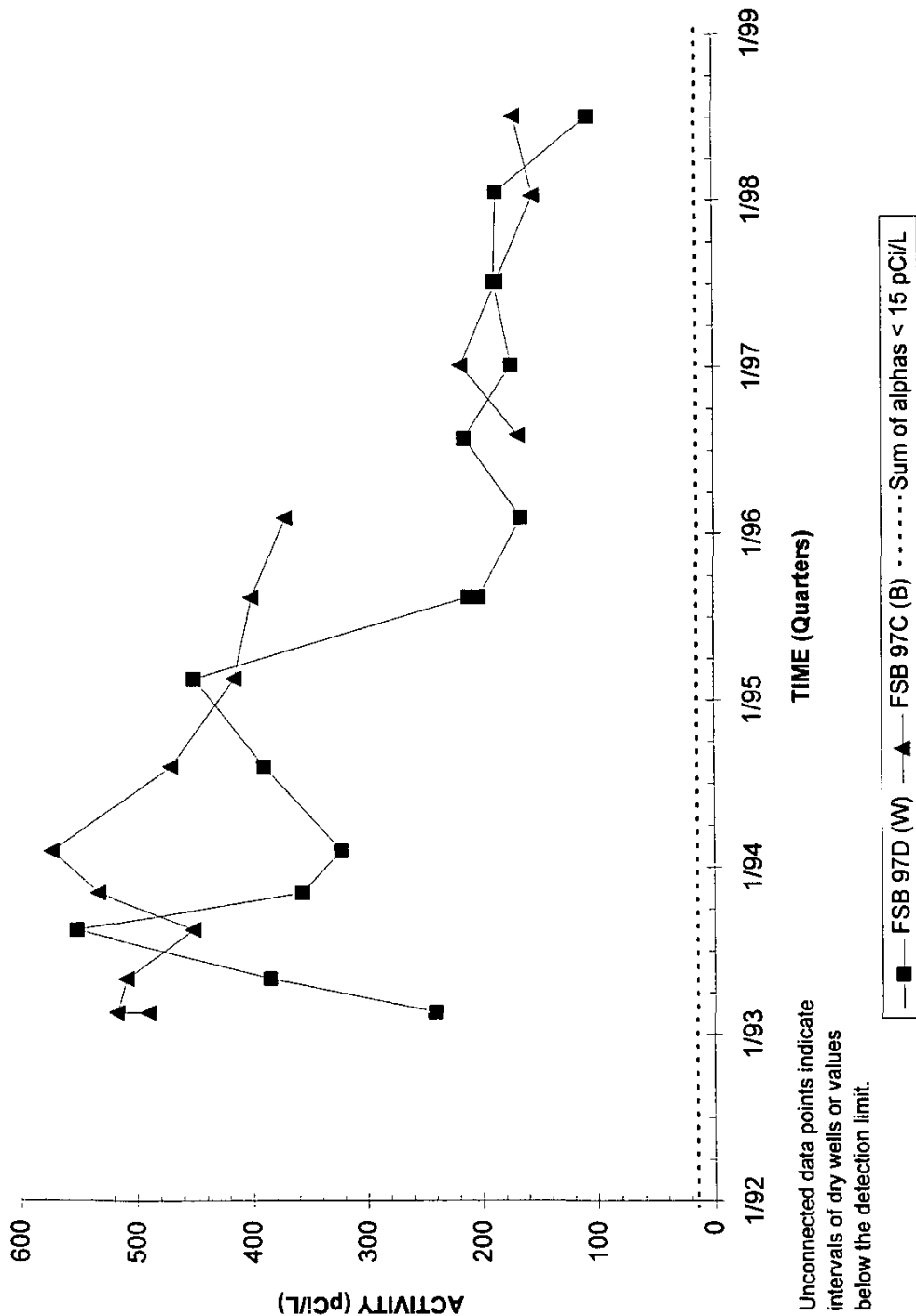
Third and Fourth Quarter 1998

## Uranium-233/234 Activities Well Cluster FSB 95



Note: W=Water Table (IIB2); B=McBean (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Uranium-233/234 Activities Well Cluster FSB 97



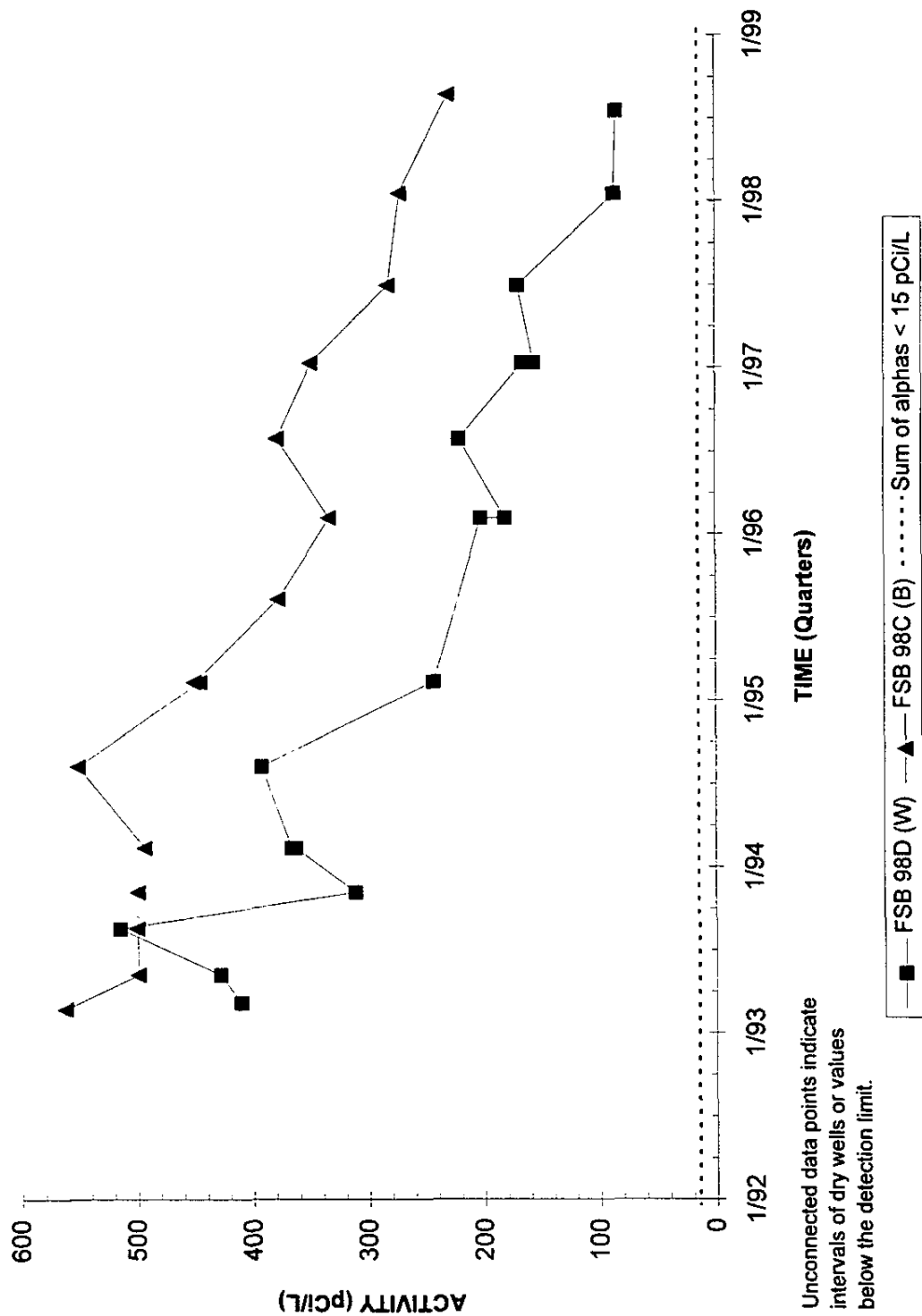
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 46

Third and Fourth Quarter 1998

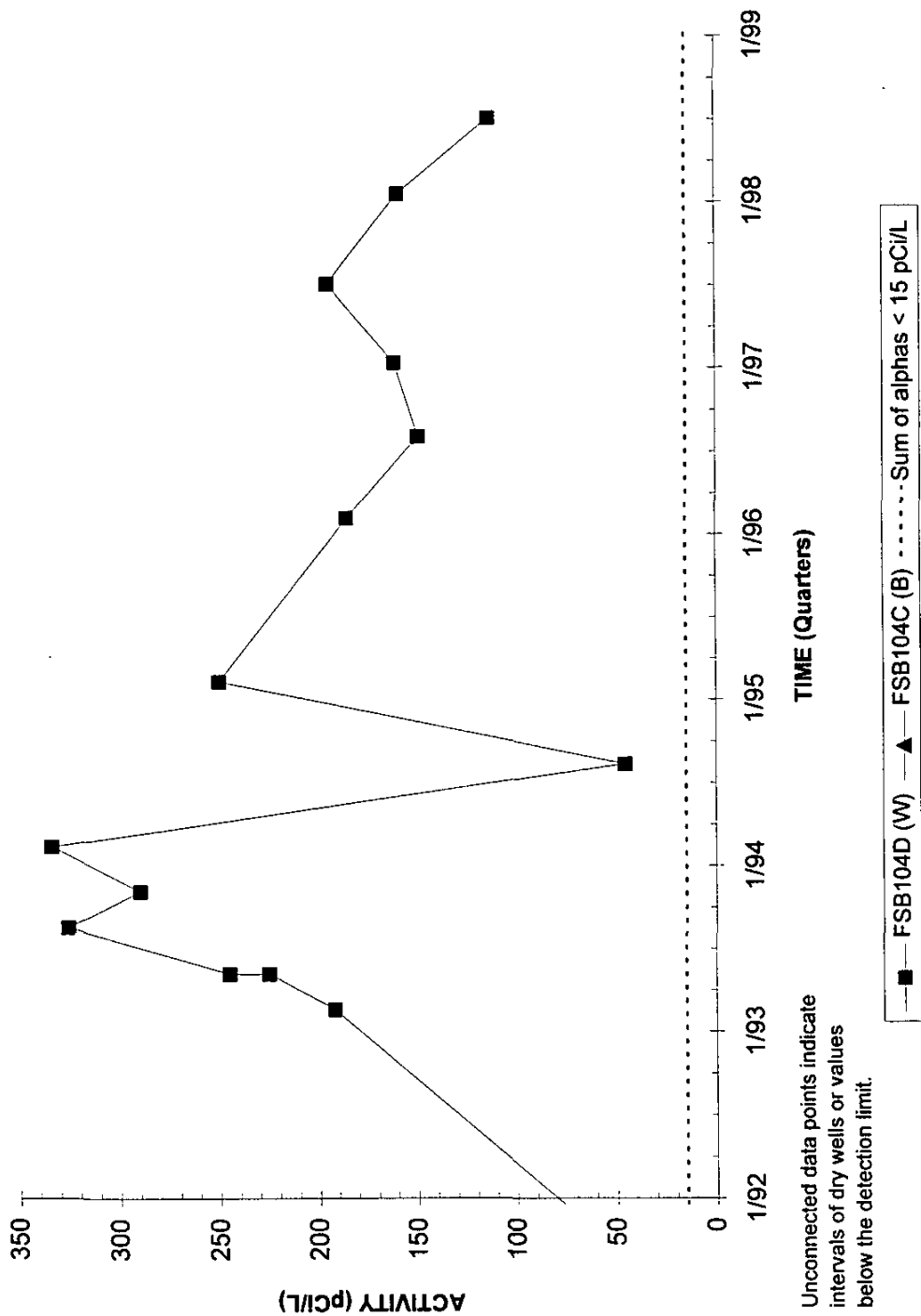
## Uranium-233/234 Activities Well Cluster FSB 98



Note: W=Water Table (IIB2); B=Barwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Uranium-233/234 Activities Well Cluster FSB104



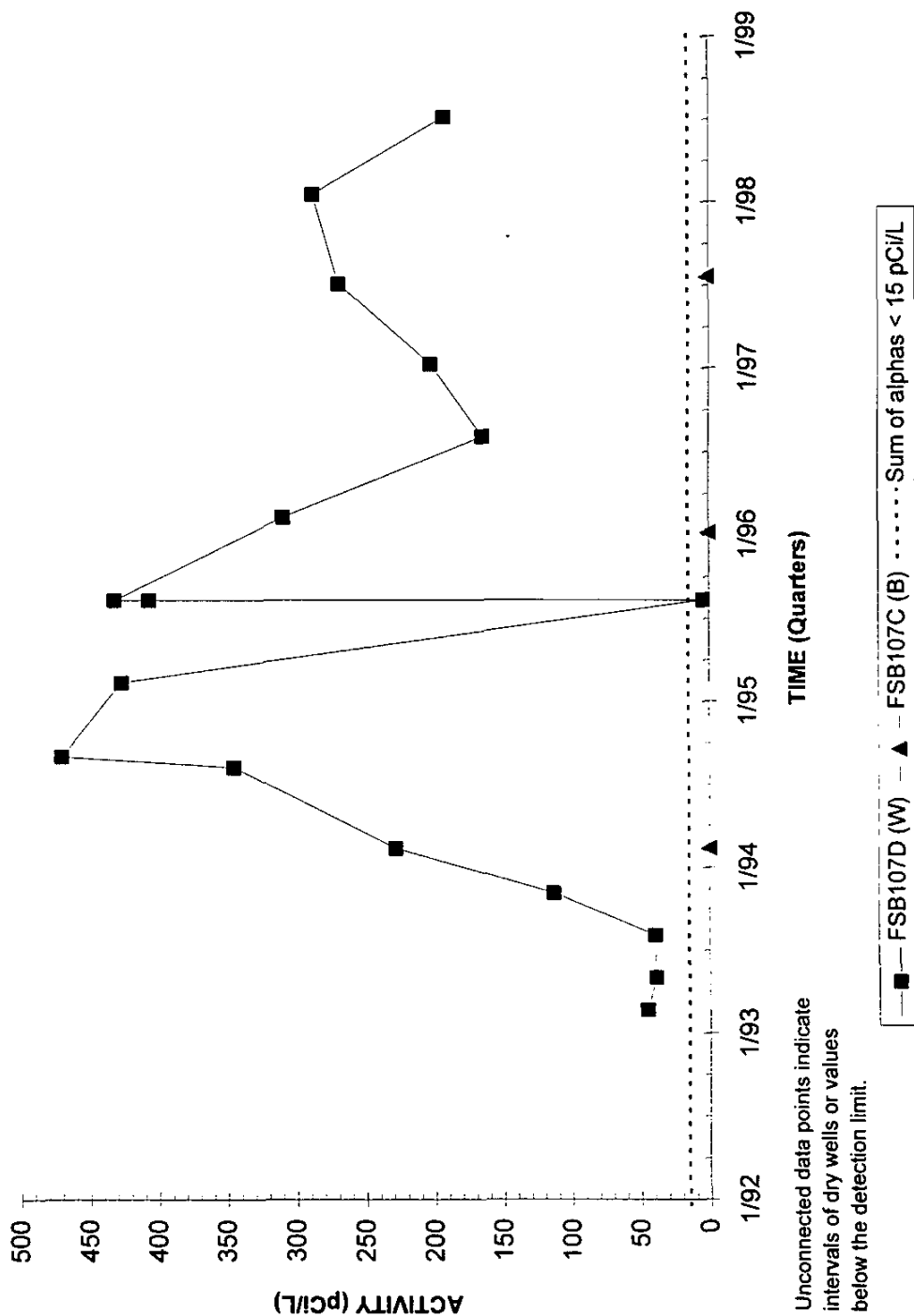
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 48

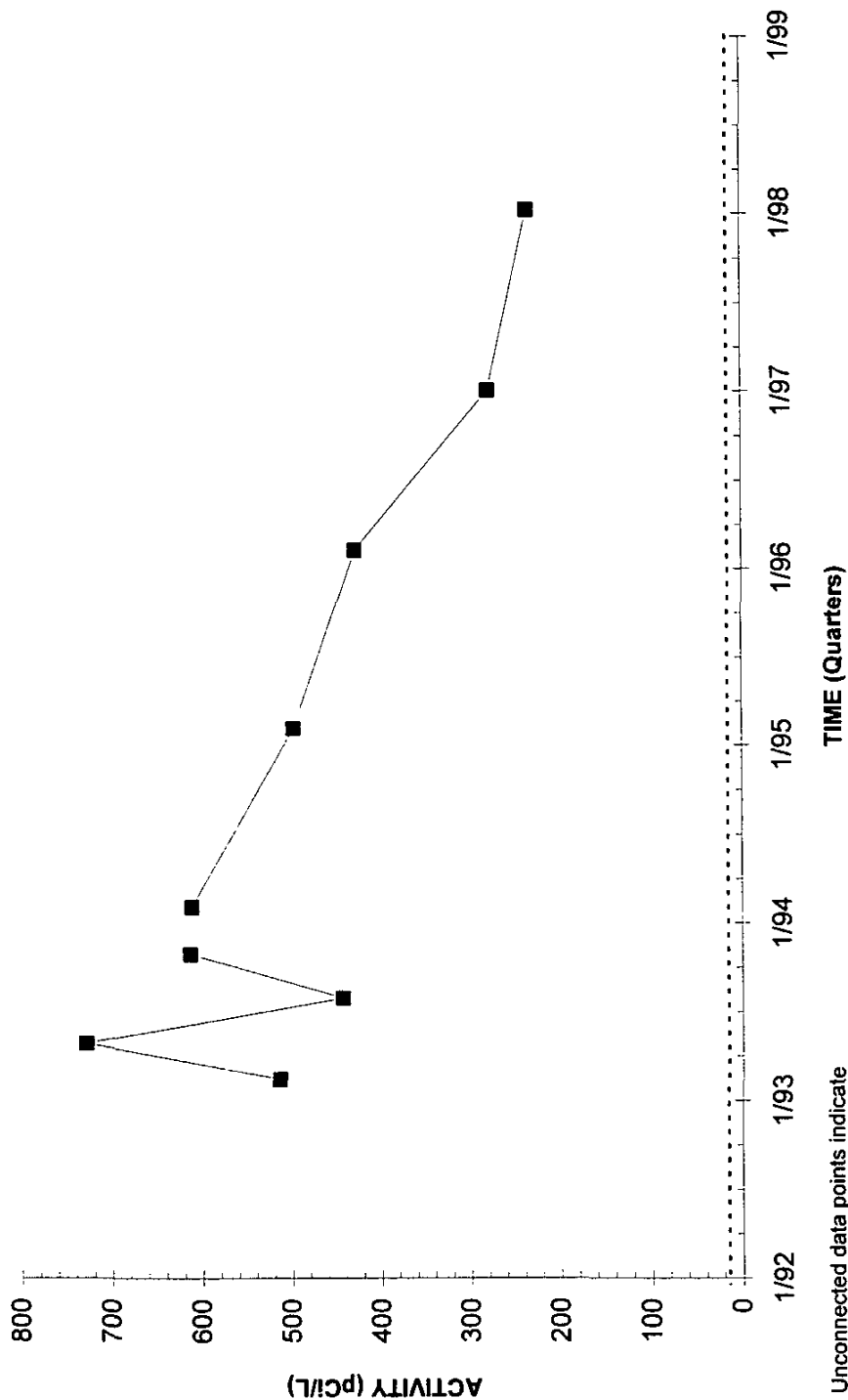
Third and Fourth Quarter 1998

## Uranium-233/234 Activities Well Cluster FSB107



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Uranium-238 Activities Well FSB 77



Unconnected data points indicate intervals of dry wells or values below the detection limit.

■ FSB 77 (W) ..... Sum of alphas < 15 pCi/L

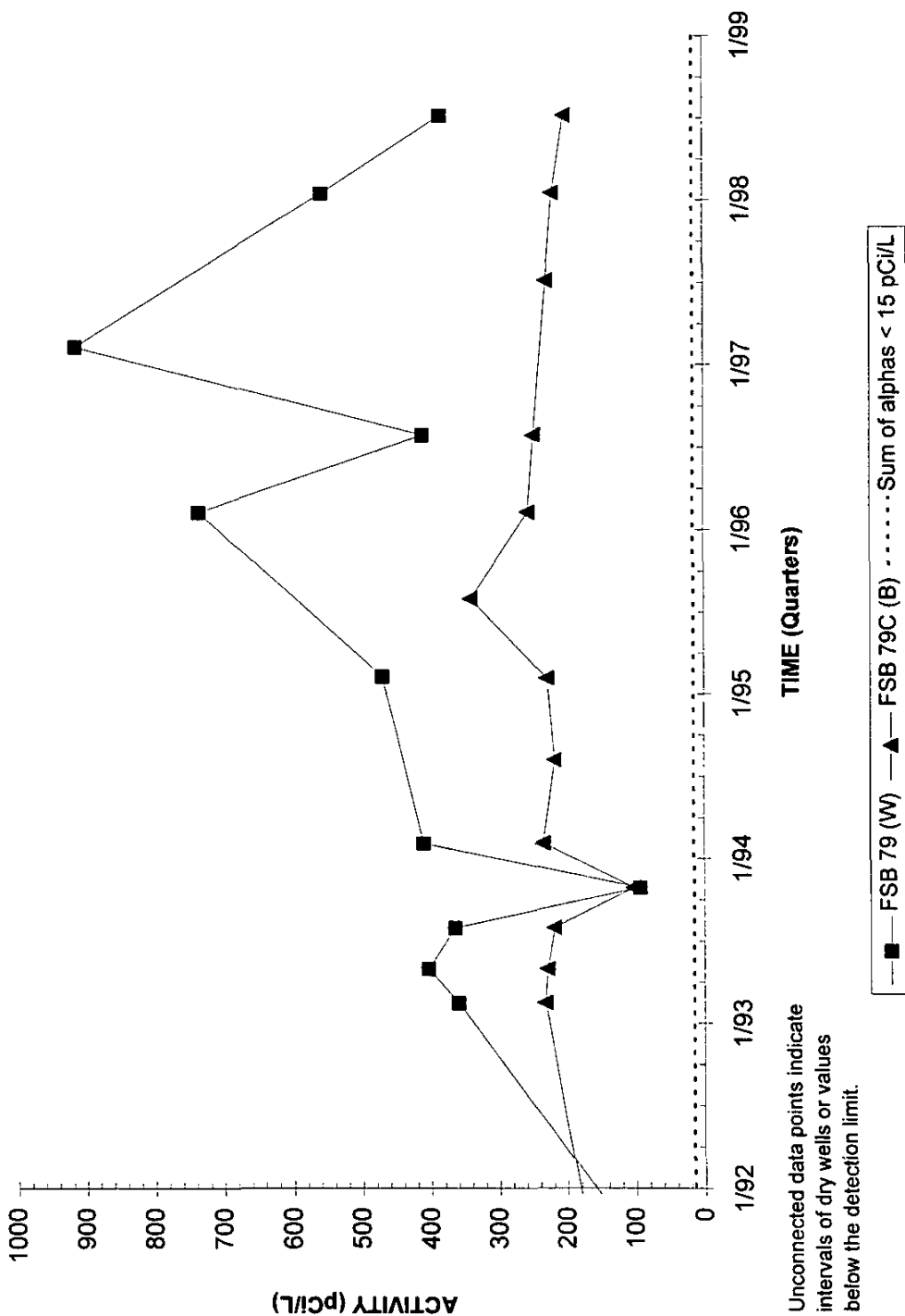
Note: W=Water Table (IB2); S=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 50

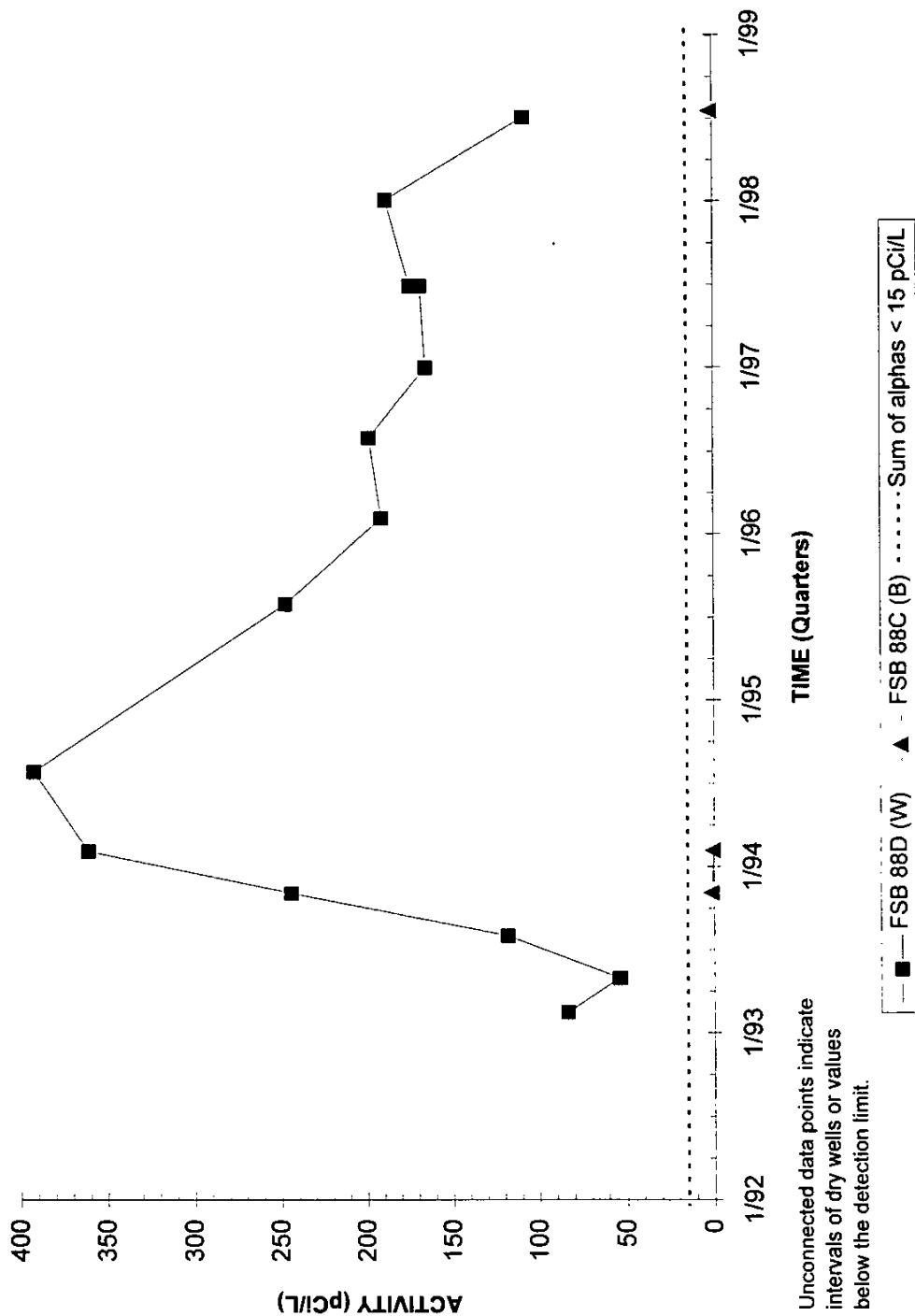
Third and Fourth Quarter 1998

## Uranium-238 Activities Well Cluster FSB 79



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IA); MC=Middle Congaree (IA); LC=Lower Congaree (IA)

# Uranium-238 Activities Well Cluster FSB 88



Unconnected data points indicate intervals of dry wells or values below the detection limit.

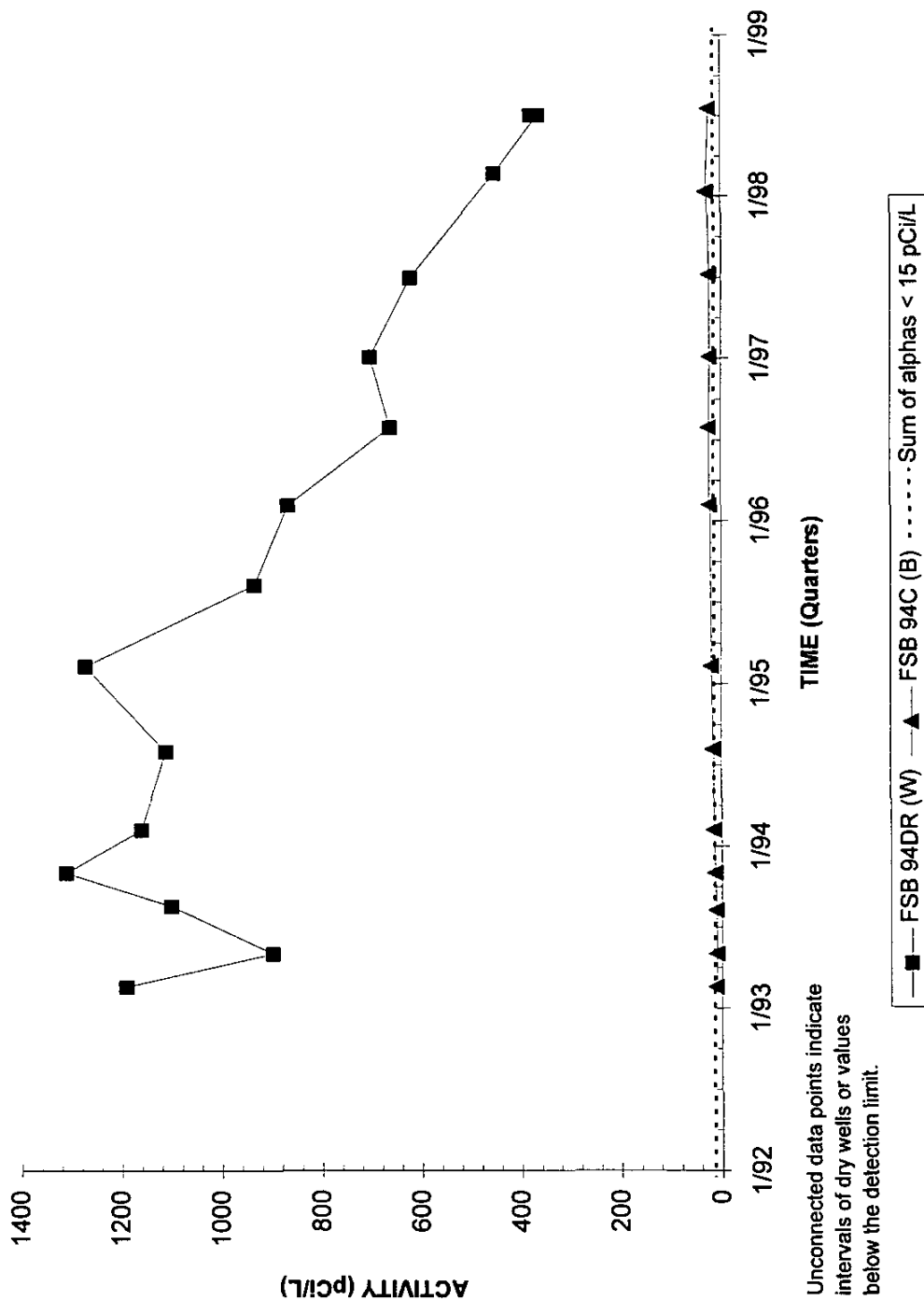
Note: W=Water Table (IIB1); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 52

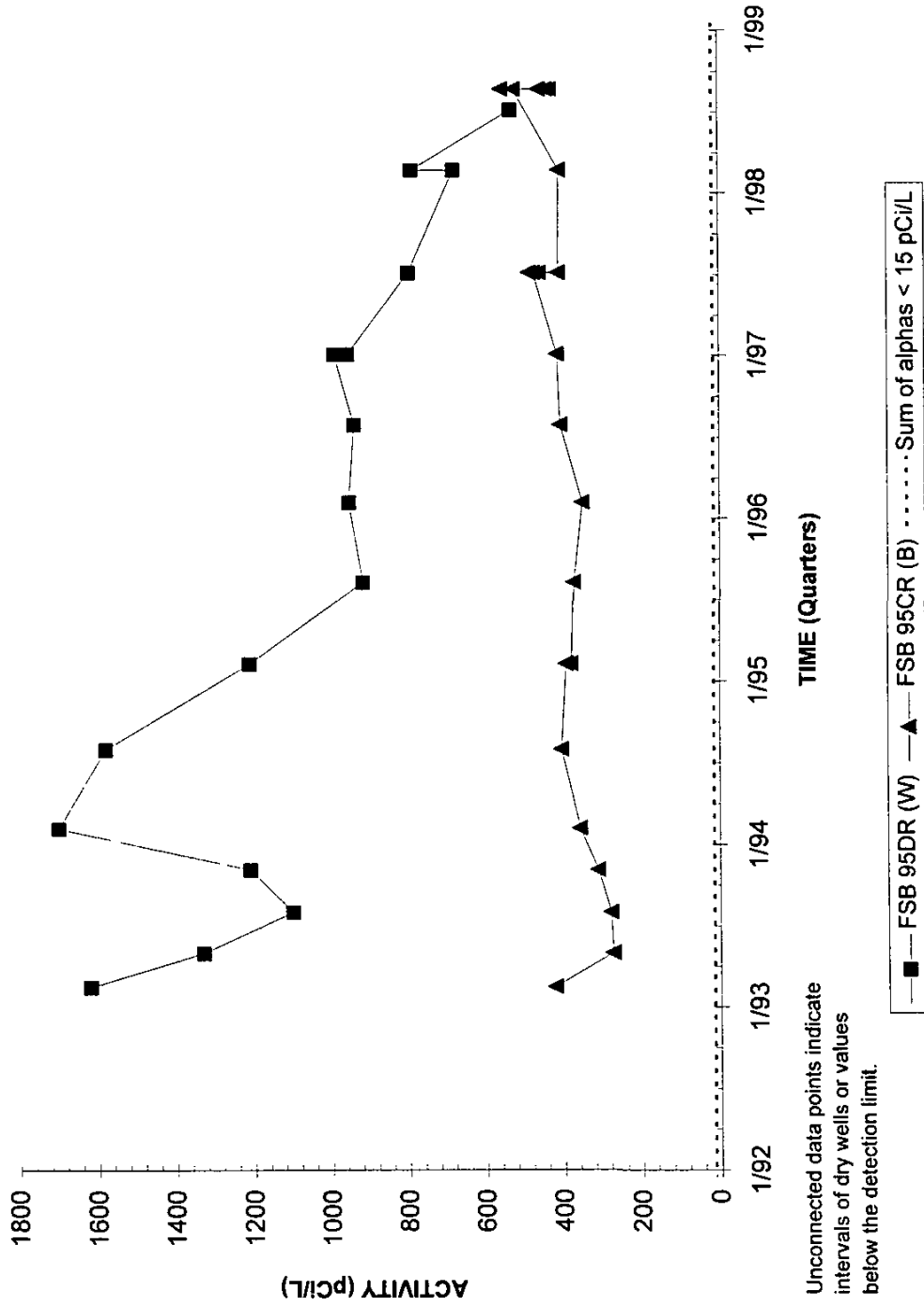
Third and Fourth Quarter 1998

## Uranium-238 Activities Well Cluster FSB 94



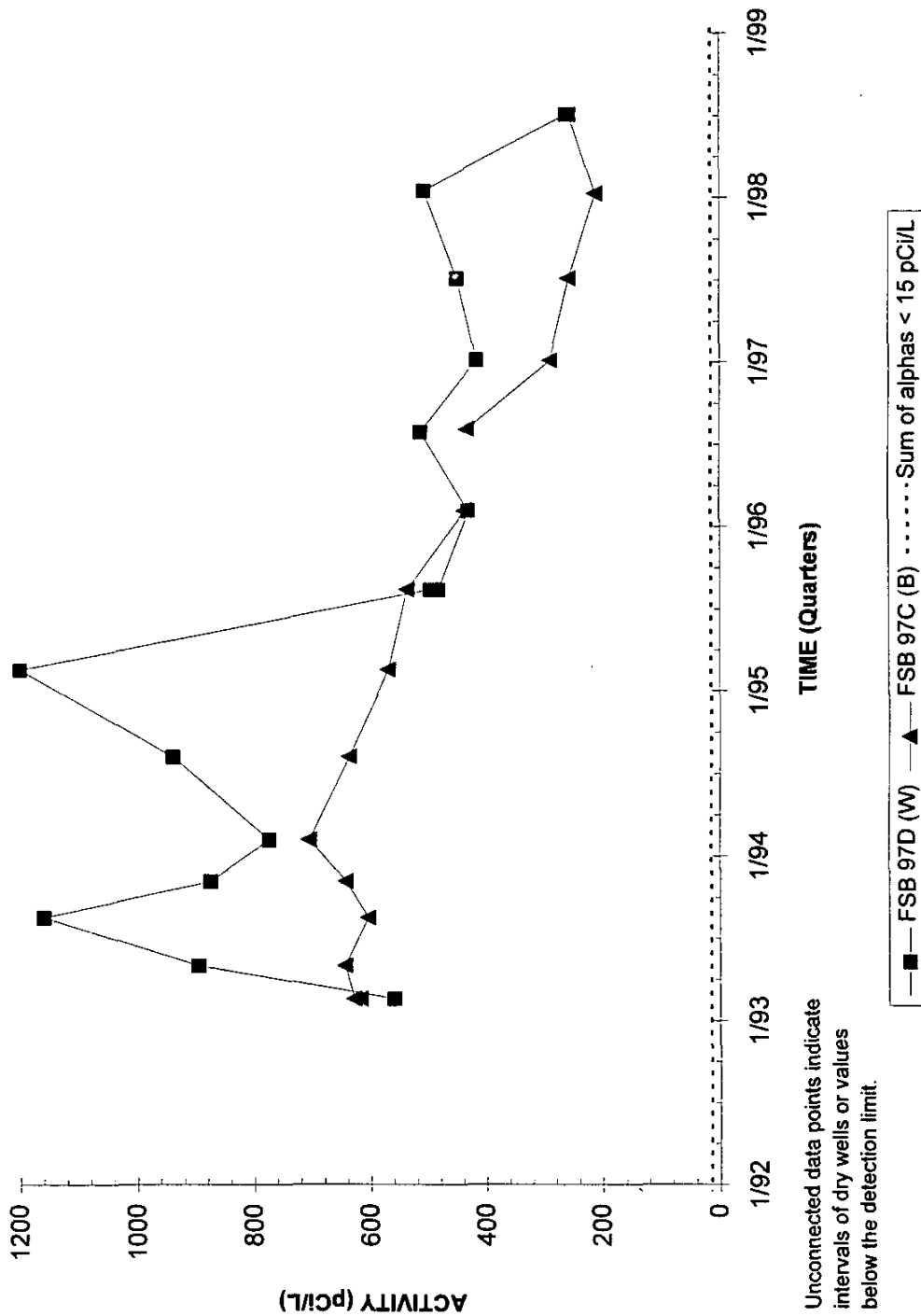
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Uranium-238 Activities Well Cluster FSB 95



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

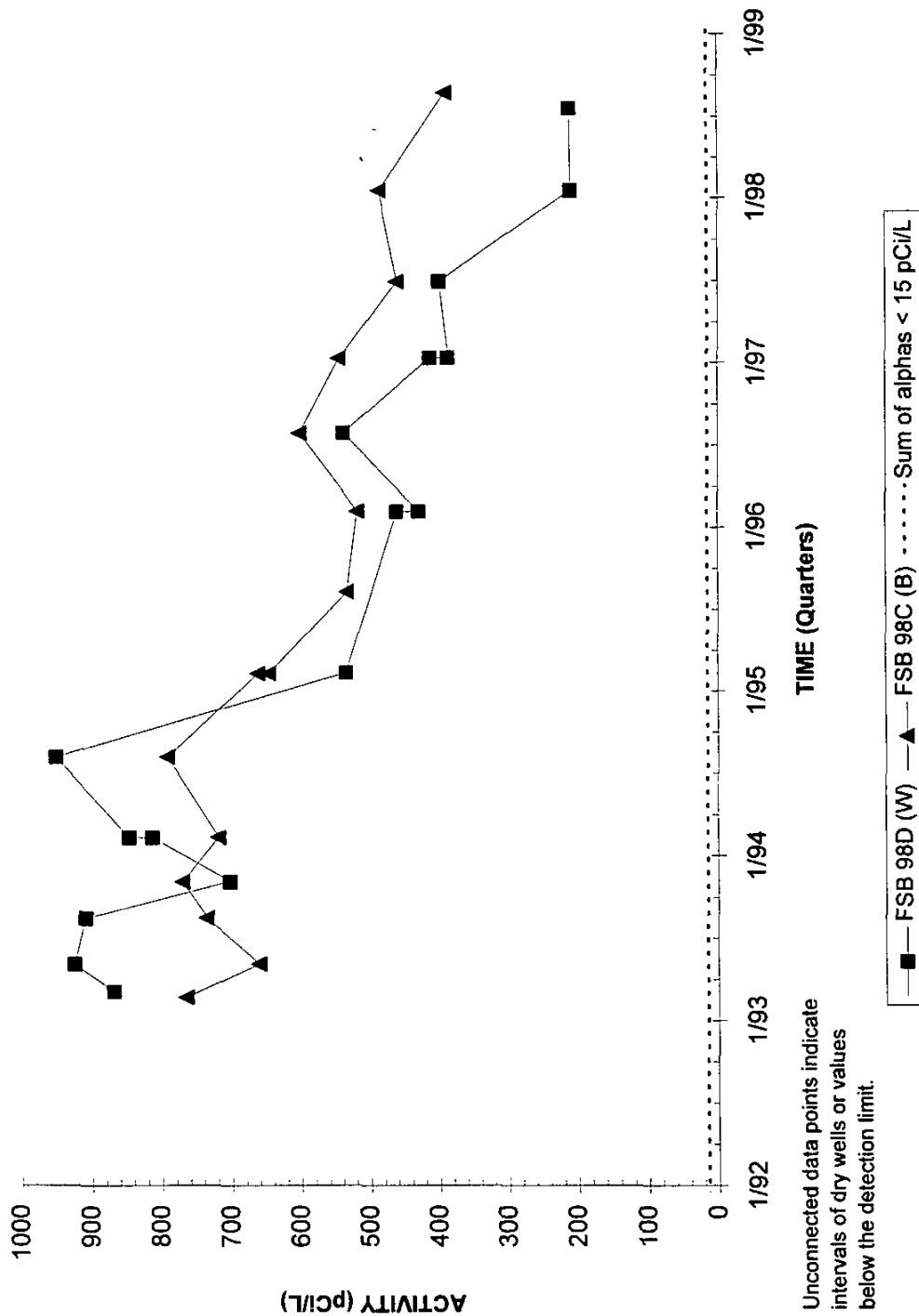
## Uranium-238 Activities Well Cluster FSB 97



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Uranium-238 Activities Well Cluster FSB 98



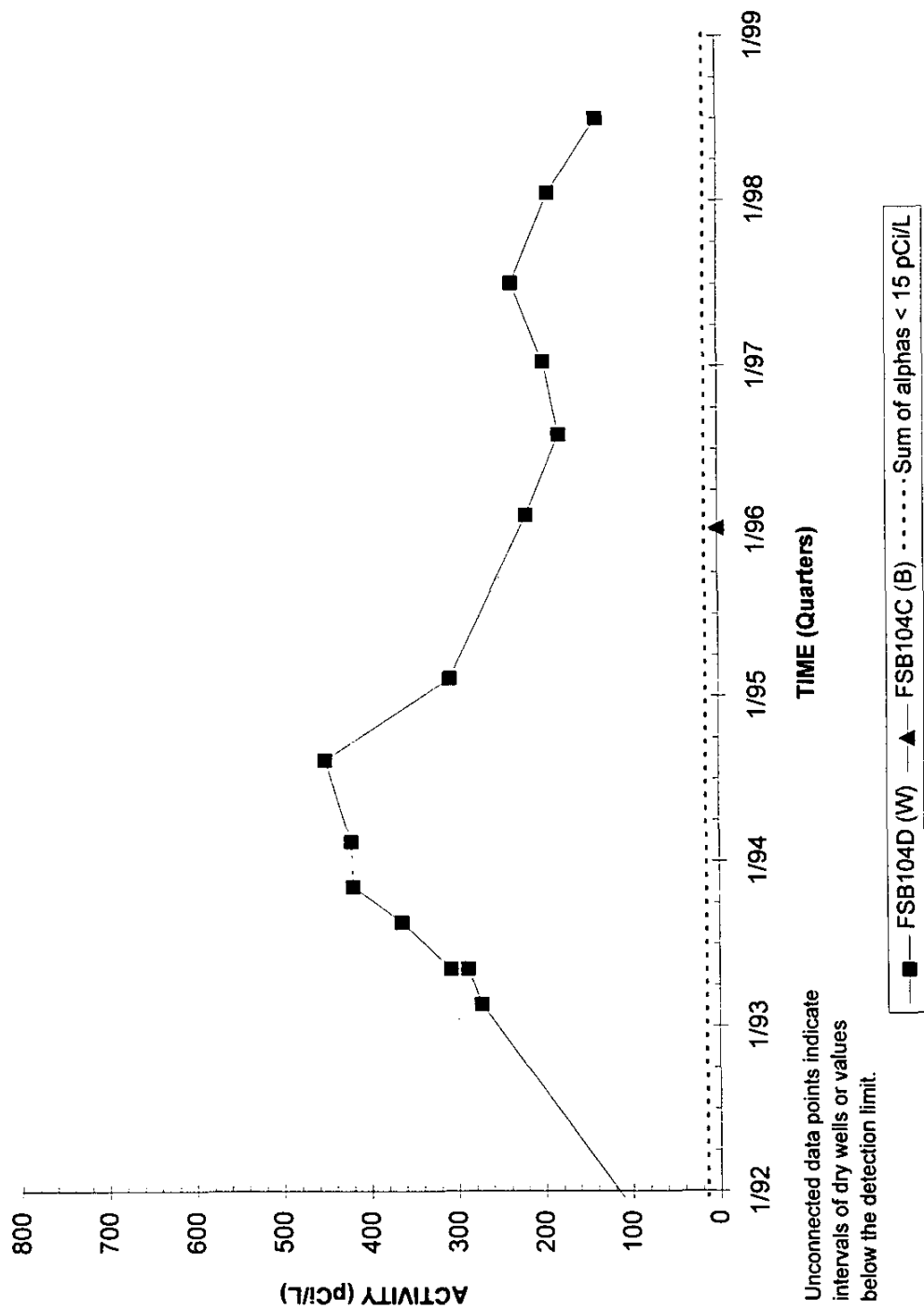
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 56

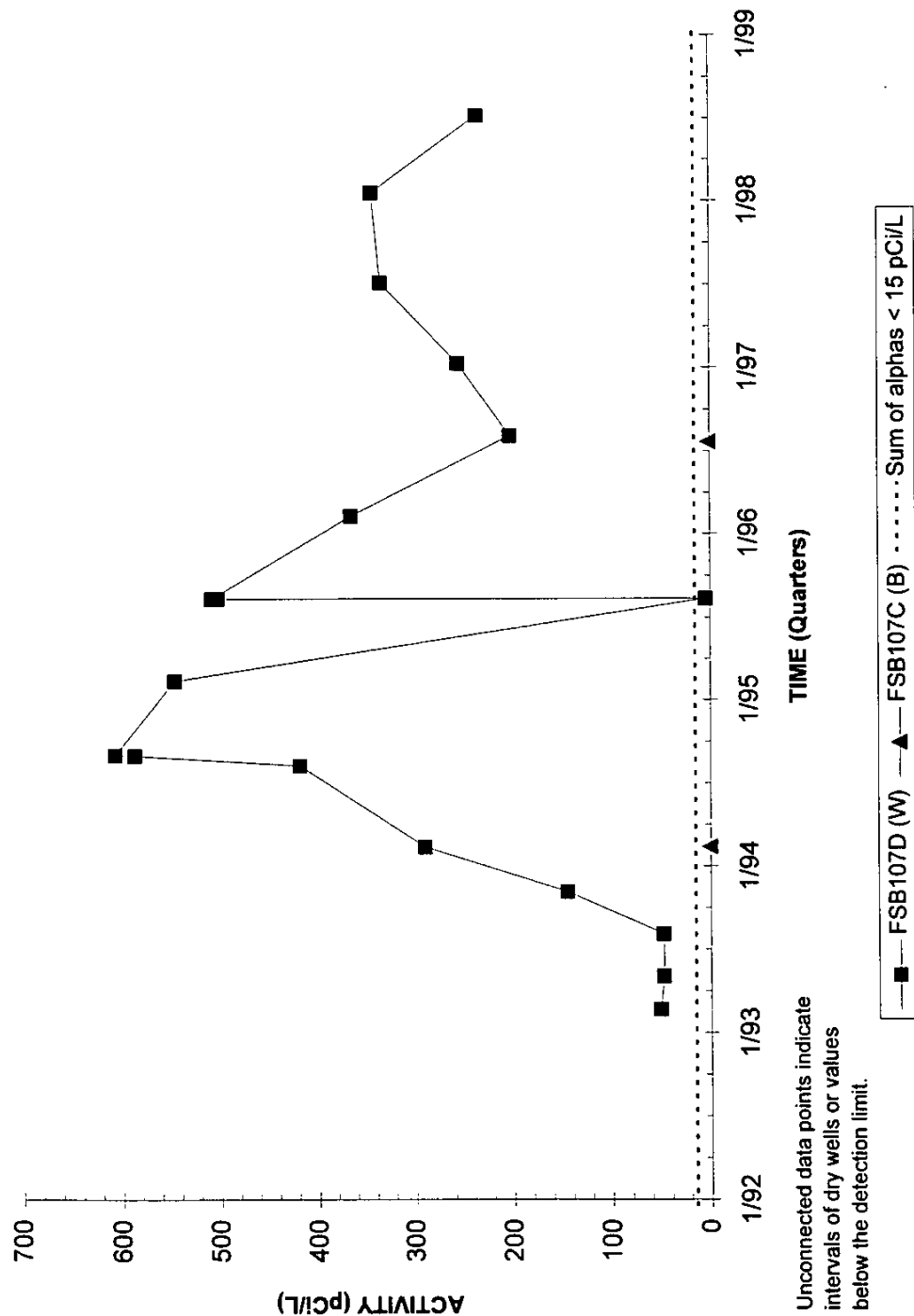
Third and Fourth Quarter 1998

## Uranium-238 Activities Well Cluster FSB104



Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Uranium-238 Activities Well Cluster FSB107



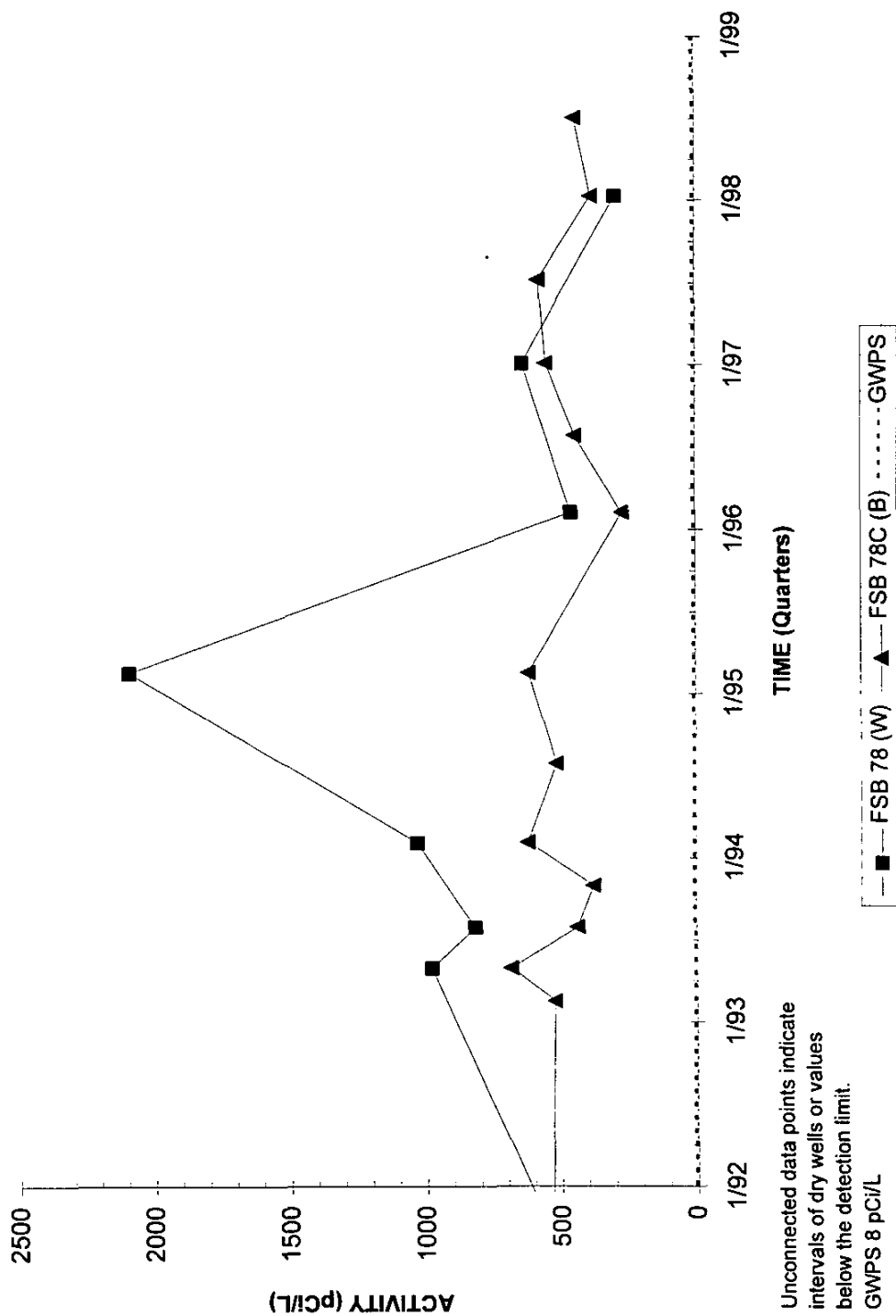
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 58

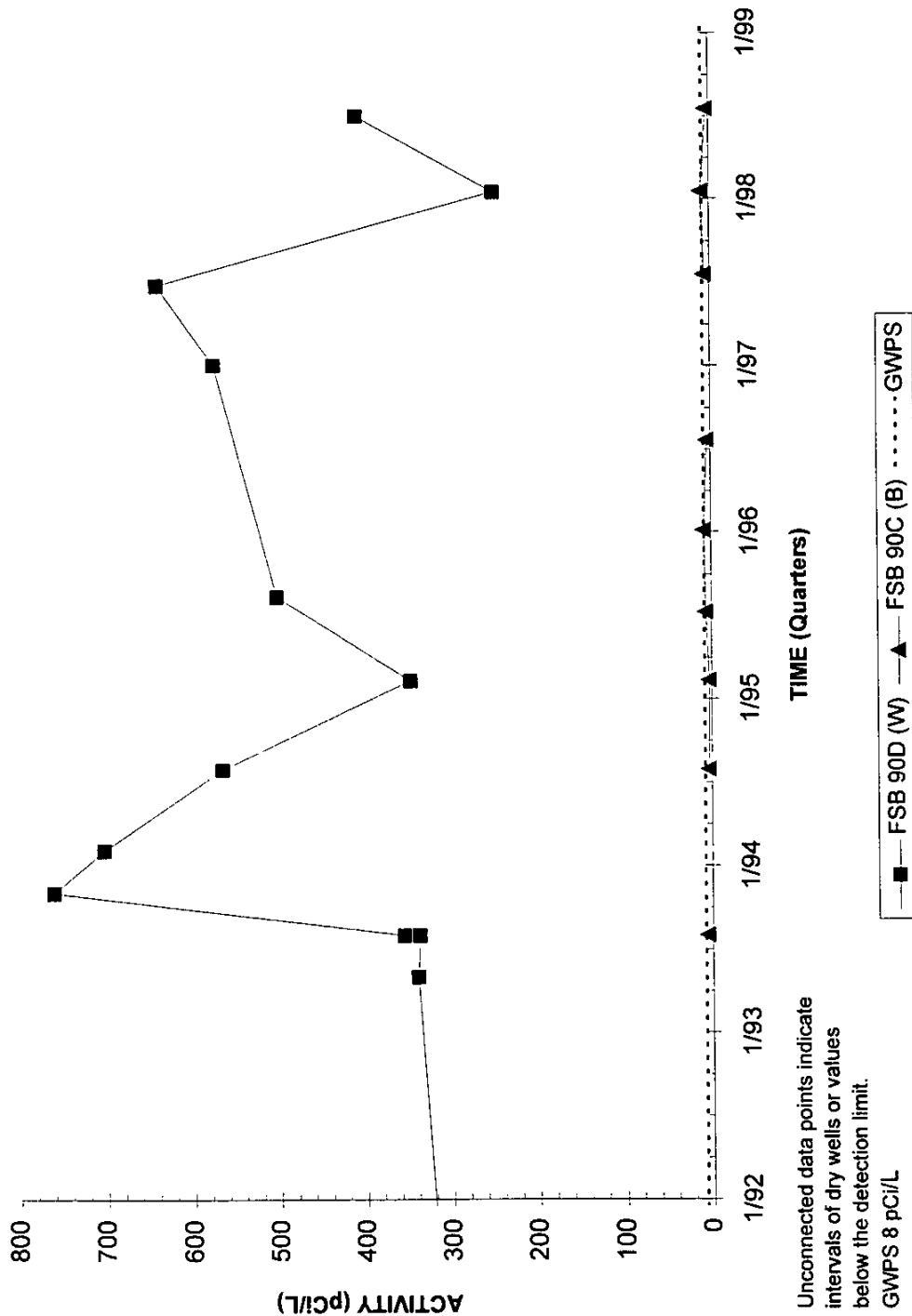
Third and Fourth Quarter 1998

## Strontium-90 Activities Well Cluster FSB 78



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Strontium-90 Activities Well Cluster FSB 90



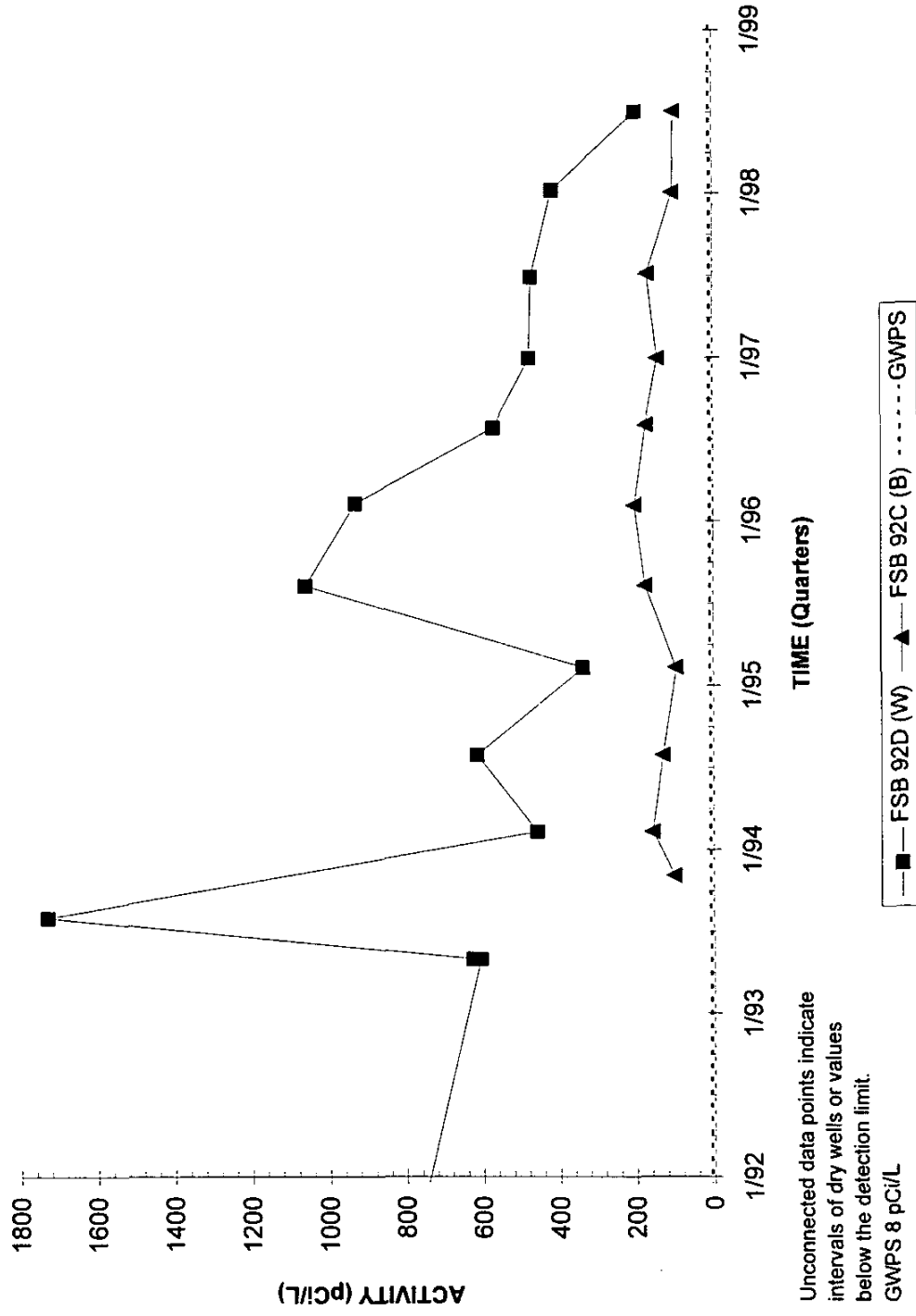
Note: W=Water Table (IIB1); B=Bamwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 60

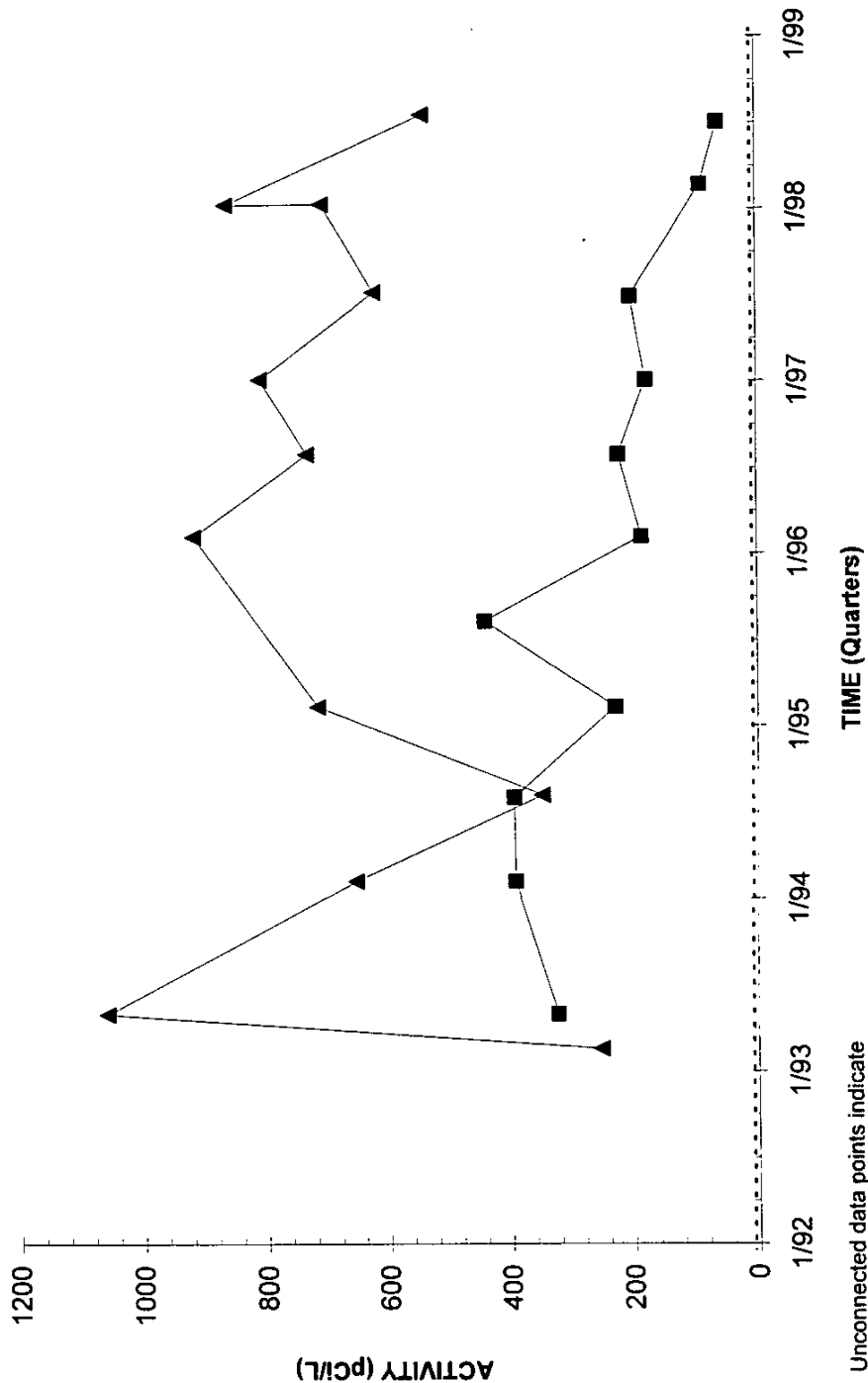
Third and Fourth Quarter 1998

## Strontium-90 Activities Well Cluster FSB 92



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Strontium-90 Activities Well Cluster FSB 94



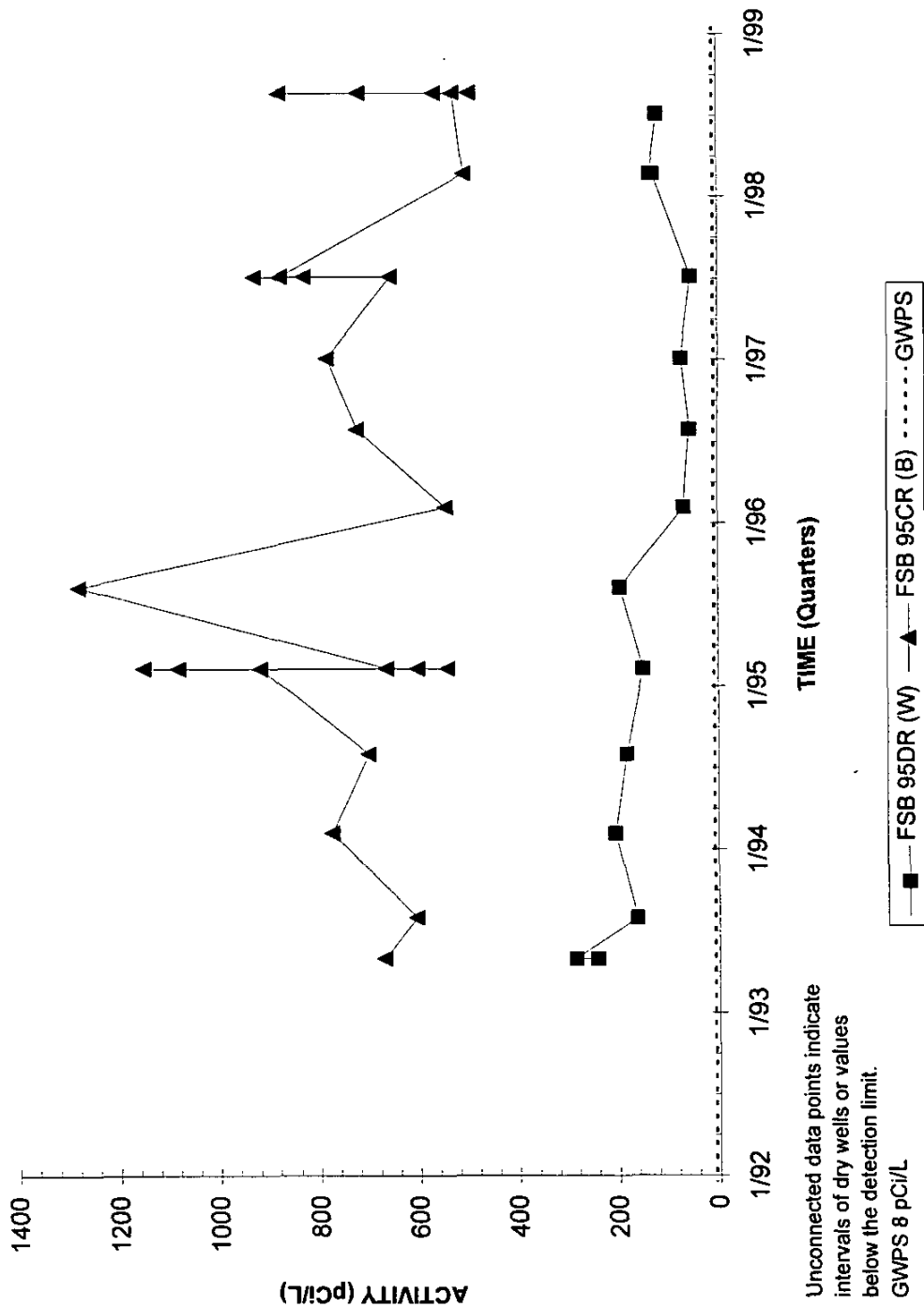
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 62

Third and Fourth Quarter 1998

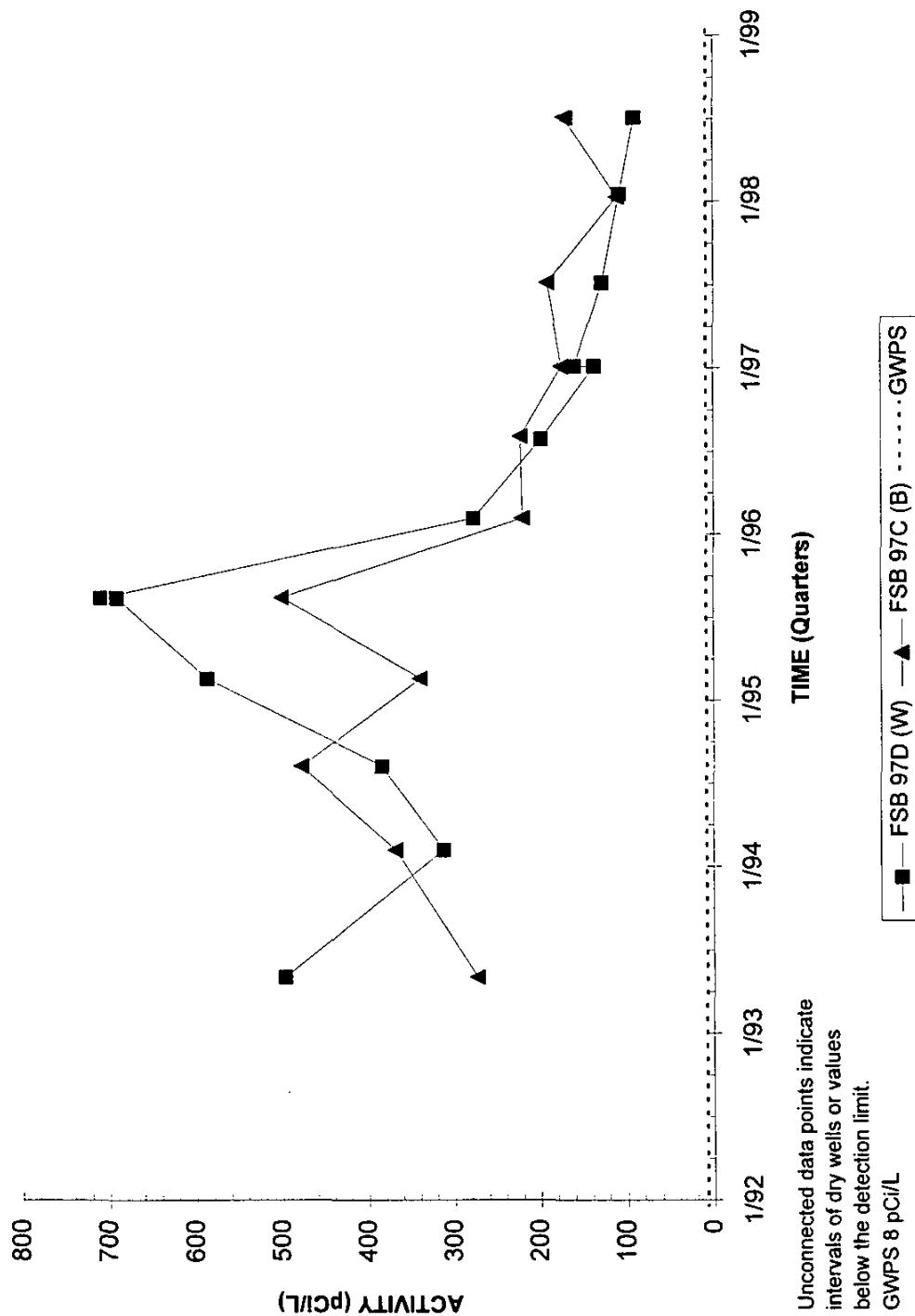
## Strontium-90 Activities Well Cluster FSB 95



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

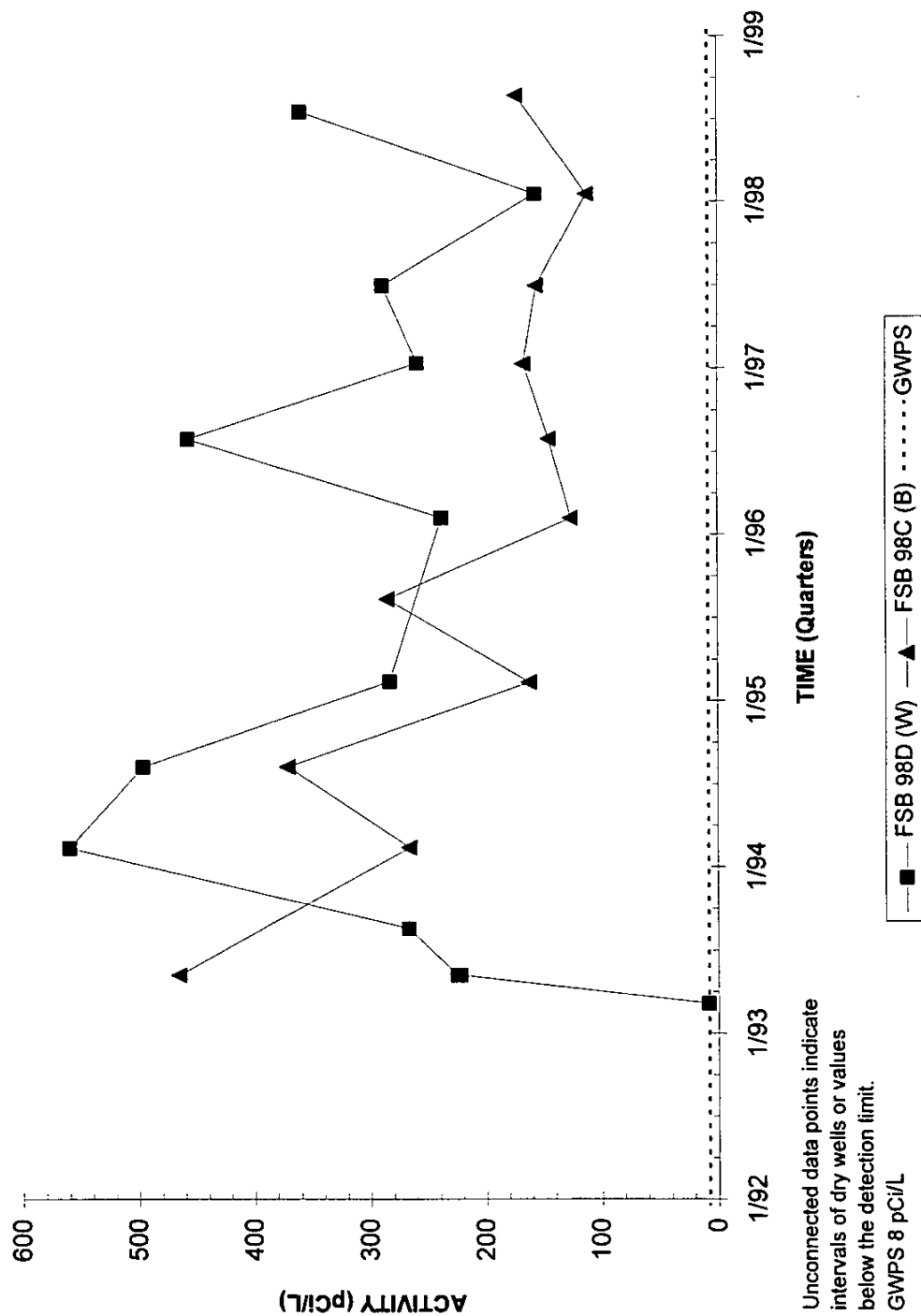


# Strontium-90 Activities Well Cluster FSB 97



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Strontium-90 Activities Well Cluster FSB 98



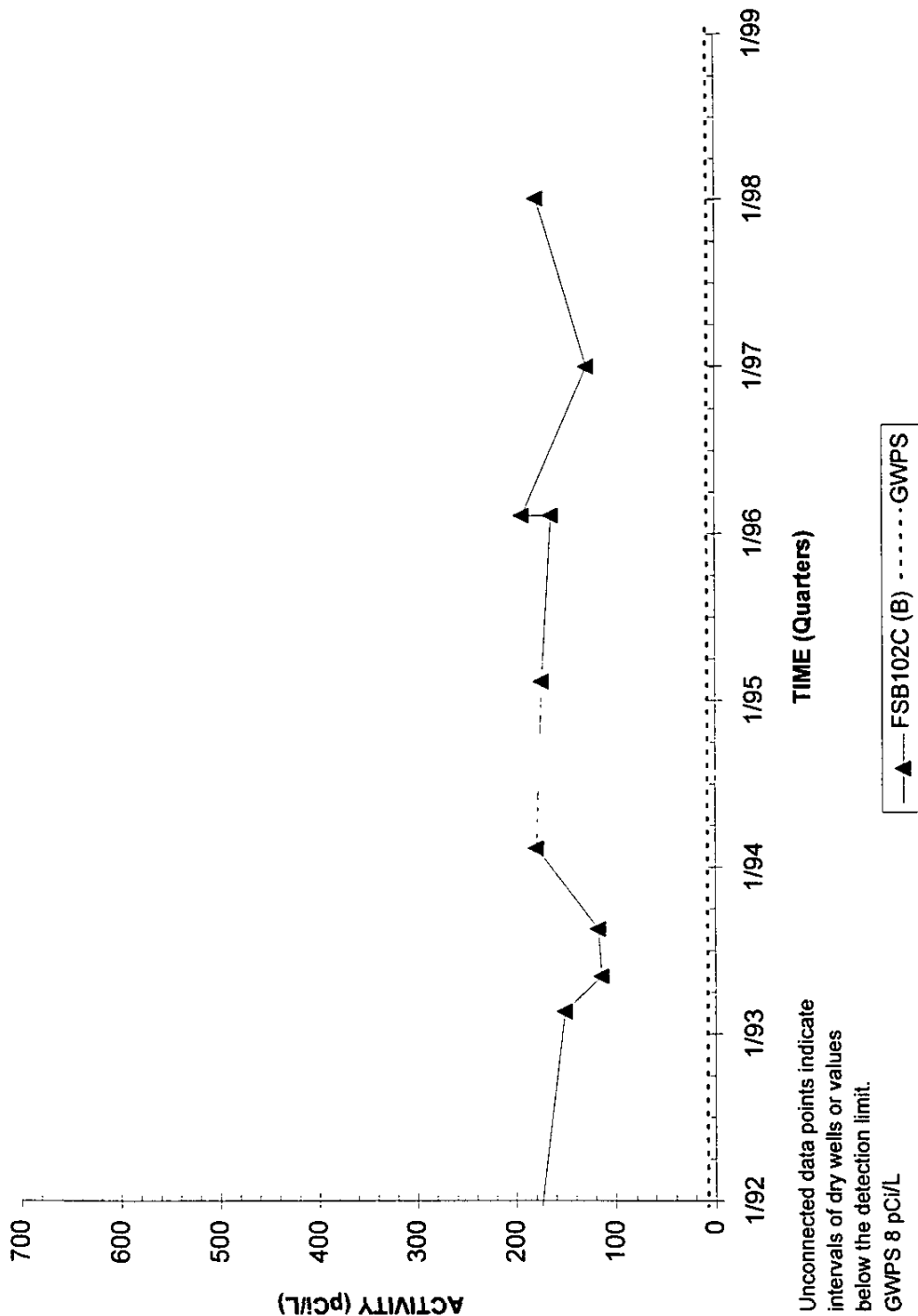
Note: W=Water Table (IIB1); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 65

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## Strontium-90 Activities Well FSB102C



Unconnected data points indicate  
intervals of dry wells or values  
below the detection limit.

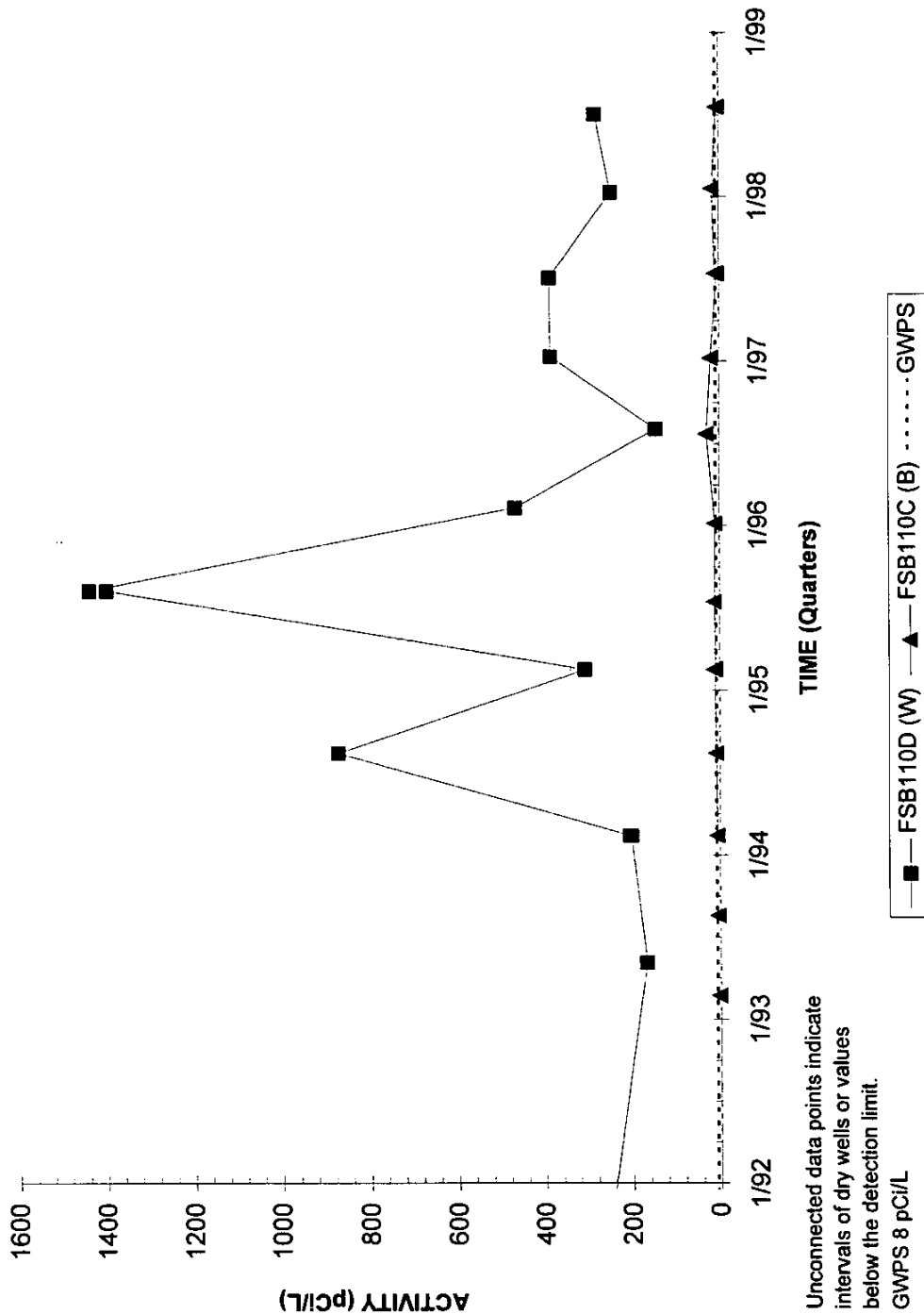
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 66

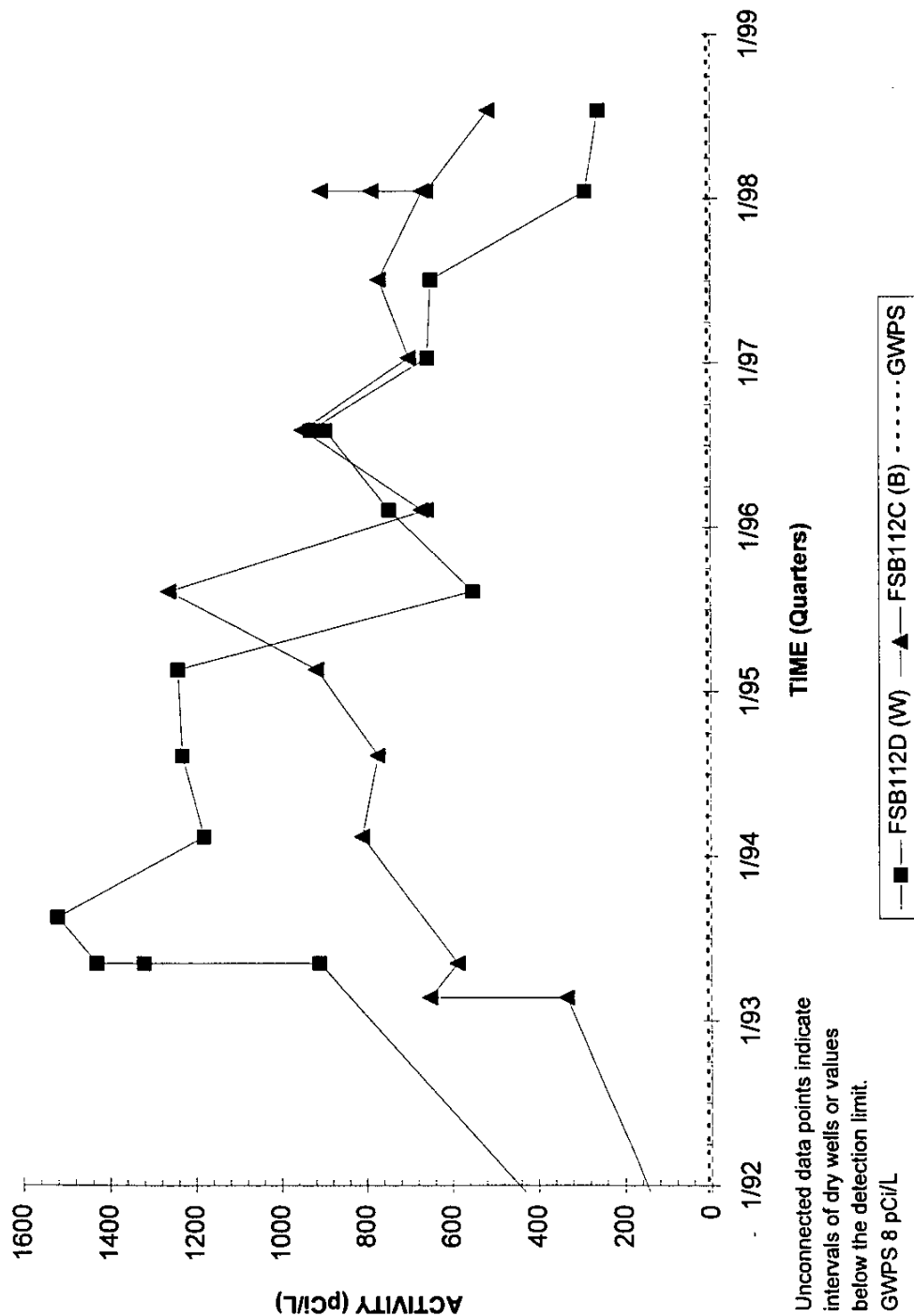
Third and Fourth Quarter 1998

## Strontium-90 Activities Well Cluster FSB110



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Strontium-90 Activities Well Cluster FSB112



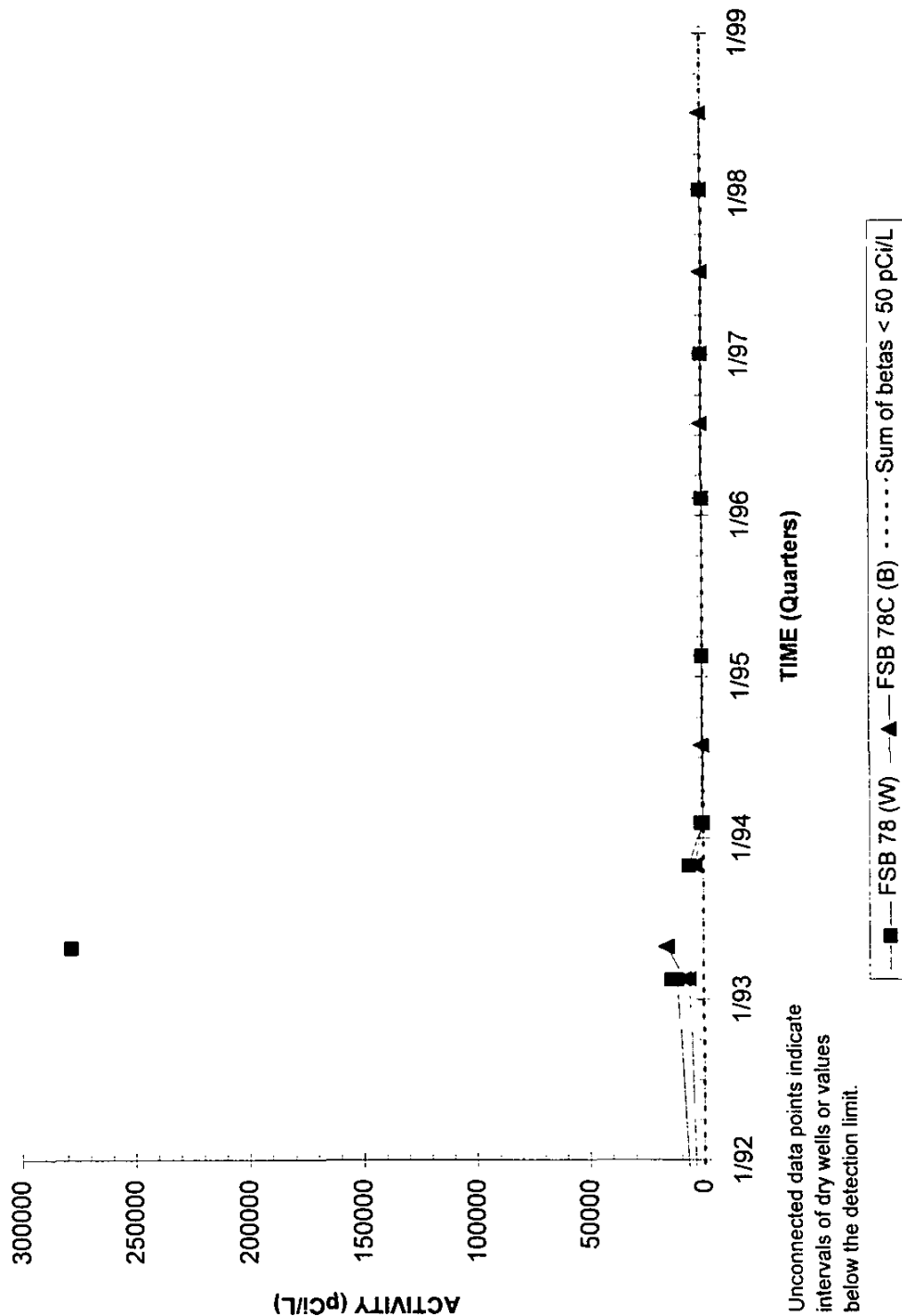
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 68

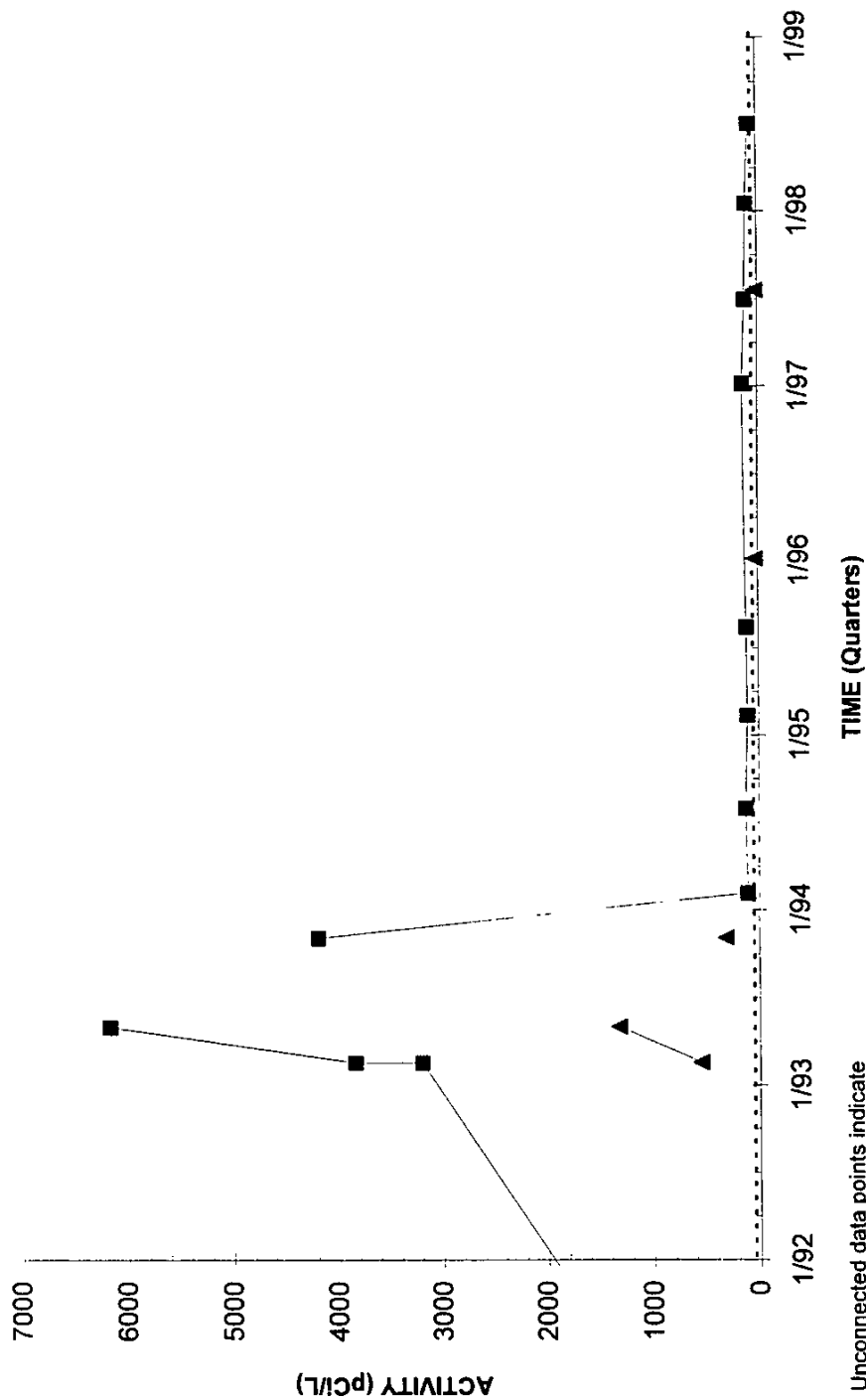
Third and Fourth Quarter 1998

## Technetium-99 Activities Well Cluster FSB 78



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Technetium-99 Activities Well Cluster FSB 90



--- FSB 90D (W) --- FSB 90C (B) ..... Sum of betas < 50 pCi/L

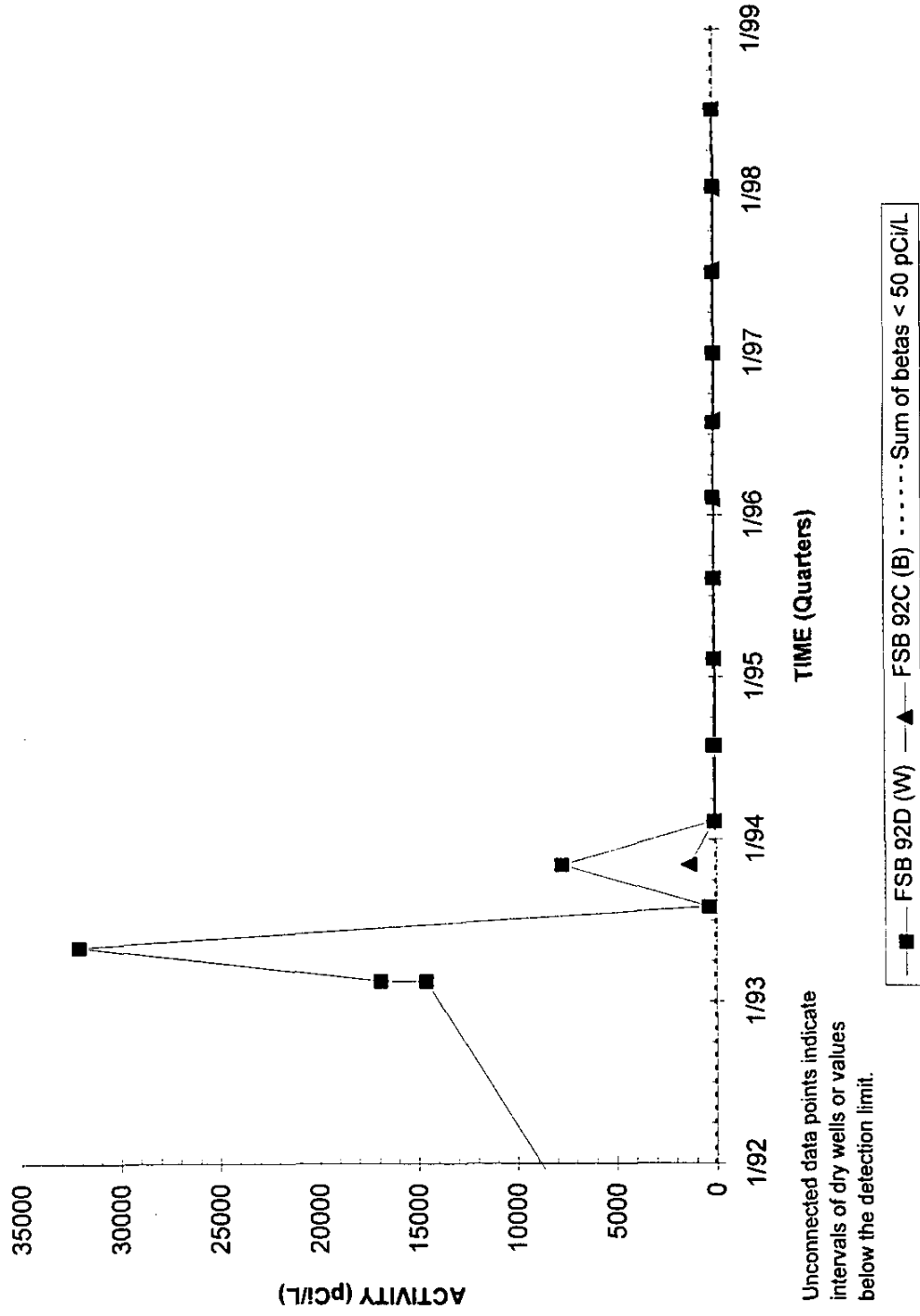
Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 70

Third and Fourth Quarter 1998

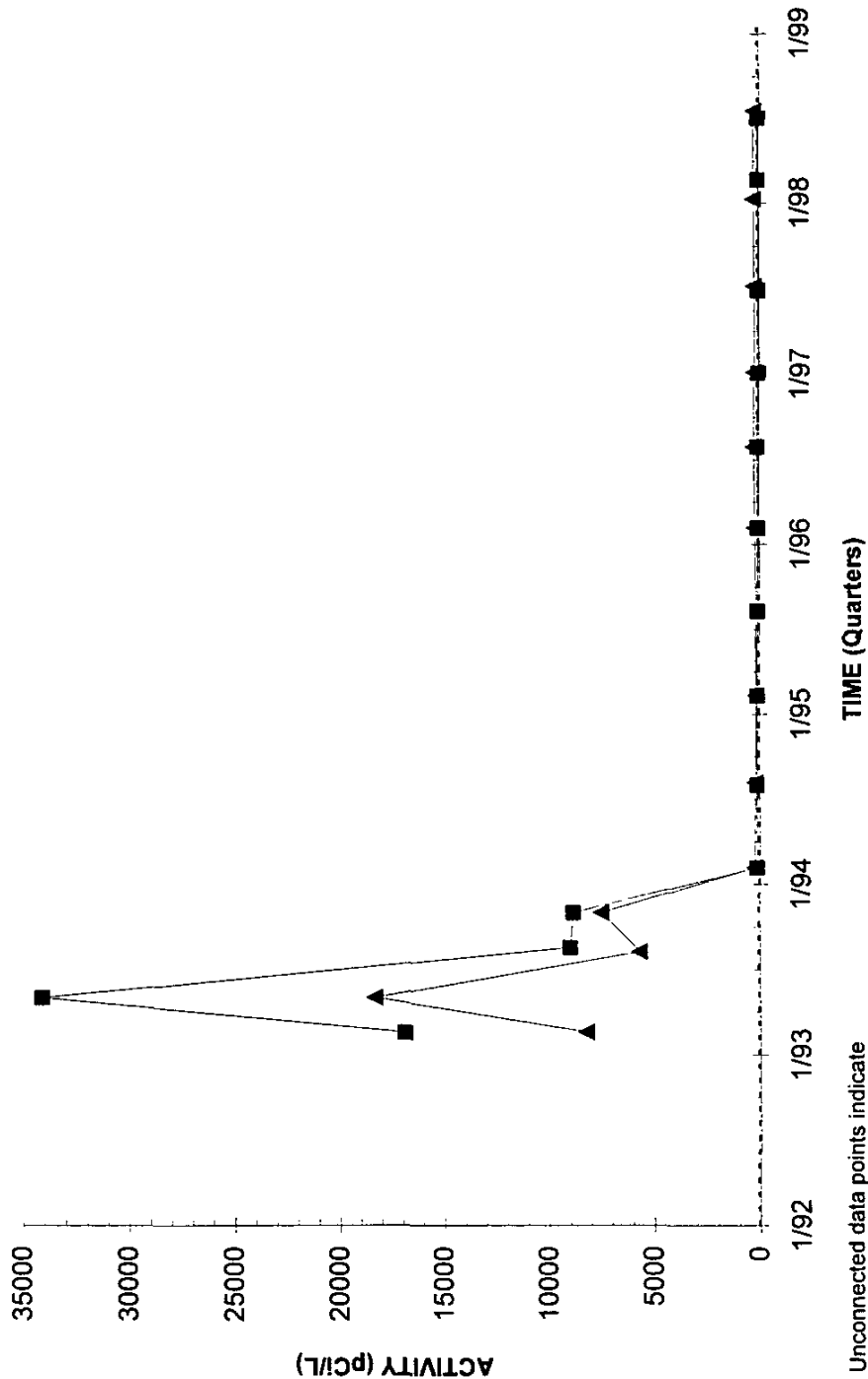
## Technetium-99 Activities Well Cluster FSB 92



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Technetium-99 Activities Well Cluster FSB 94



■ — FSB 94DR (W) ▲ — FSB 94C (B) - - - - - Sum of betas < 50 pCi/L

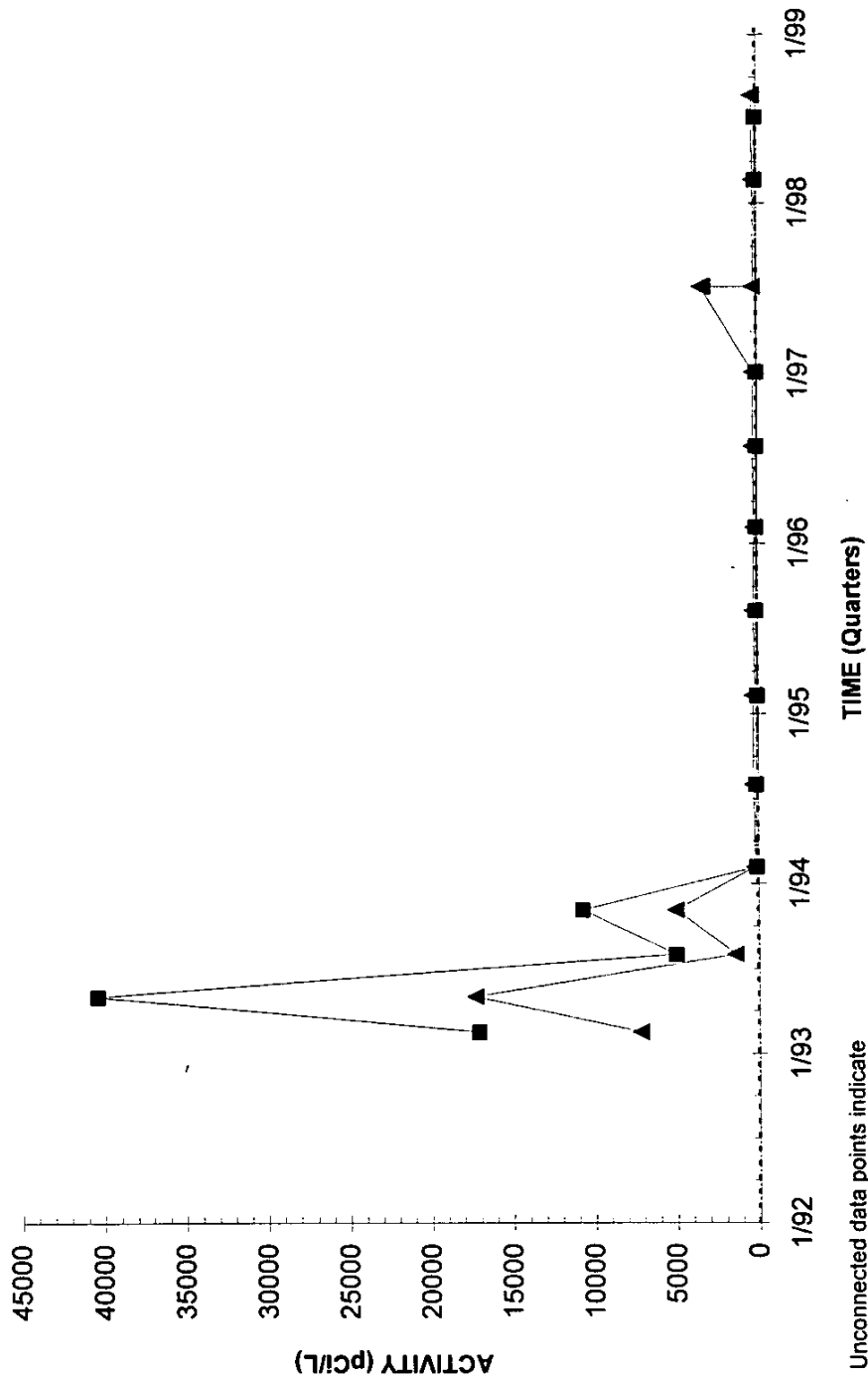
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 72

Third and Fourth Quarter 1998

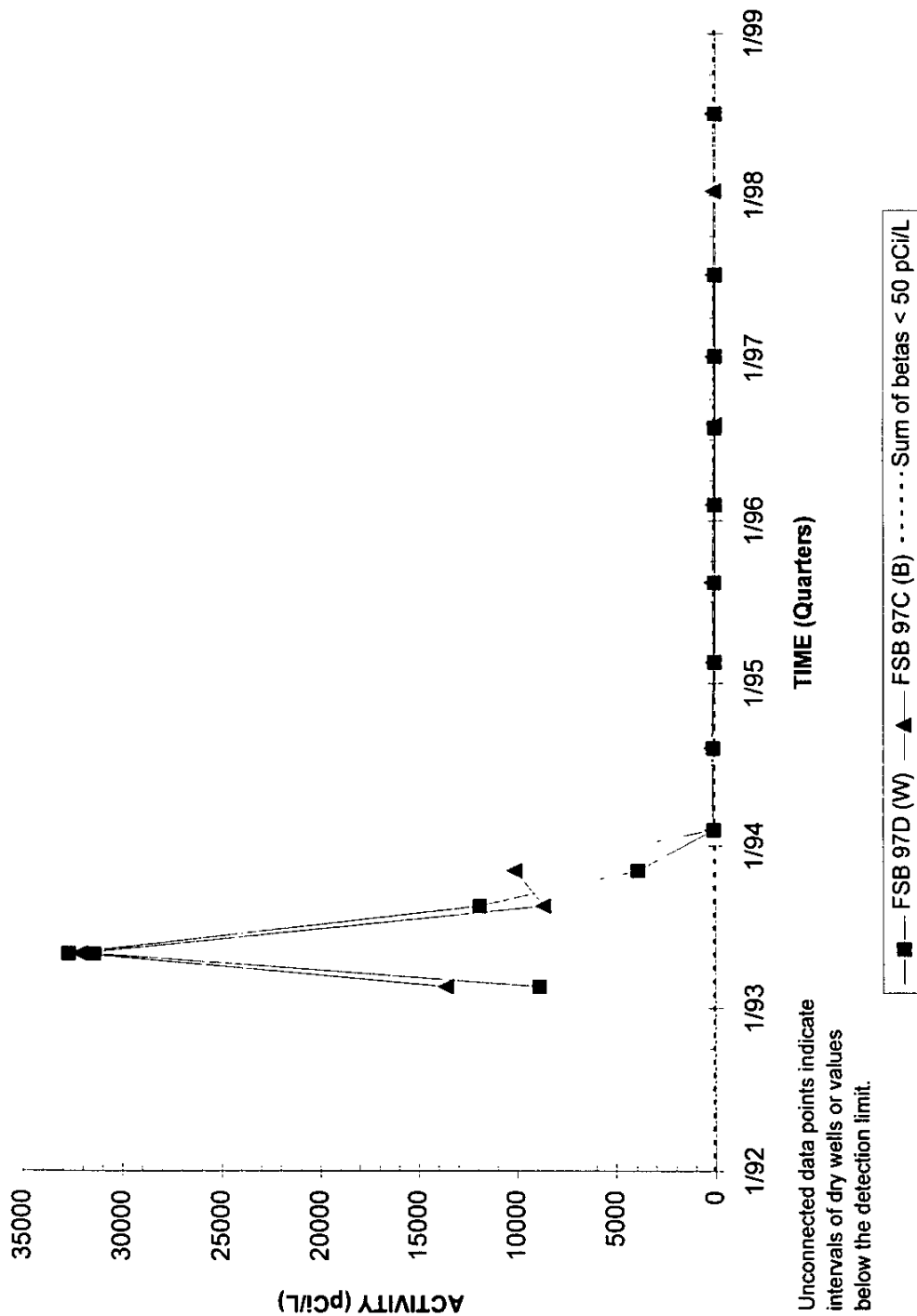
## Technetium-99 Activities Well Cluster FSB 95



Unconnected data points indicate intervals of dry wells or values below the detection limit.

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Technetium-99 Activities Well Cluster FSB 97



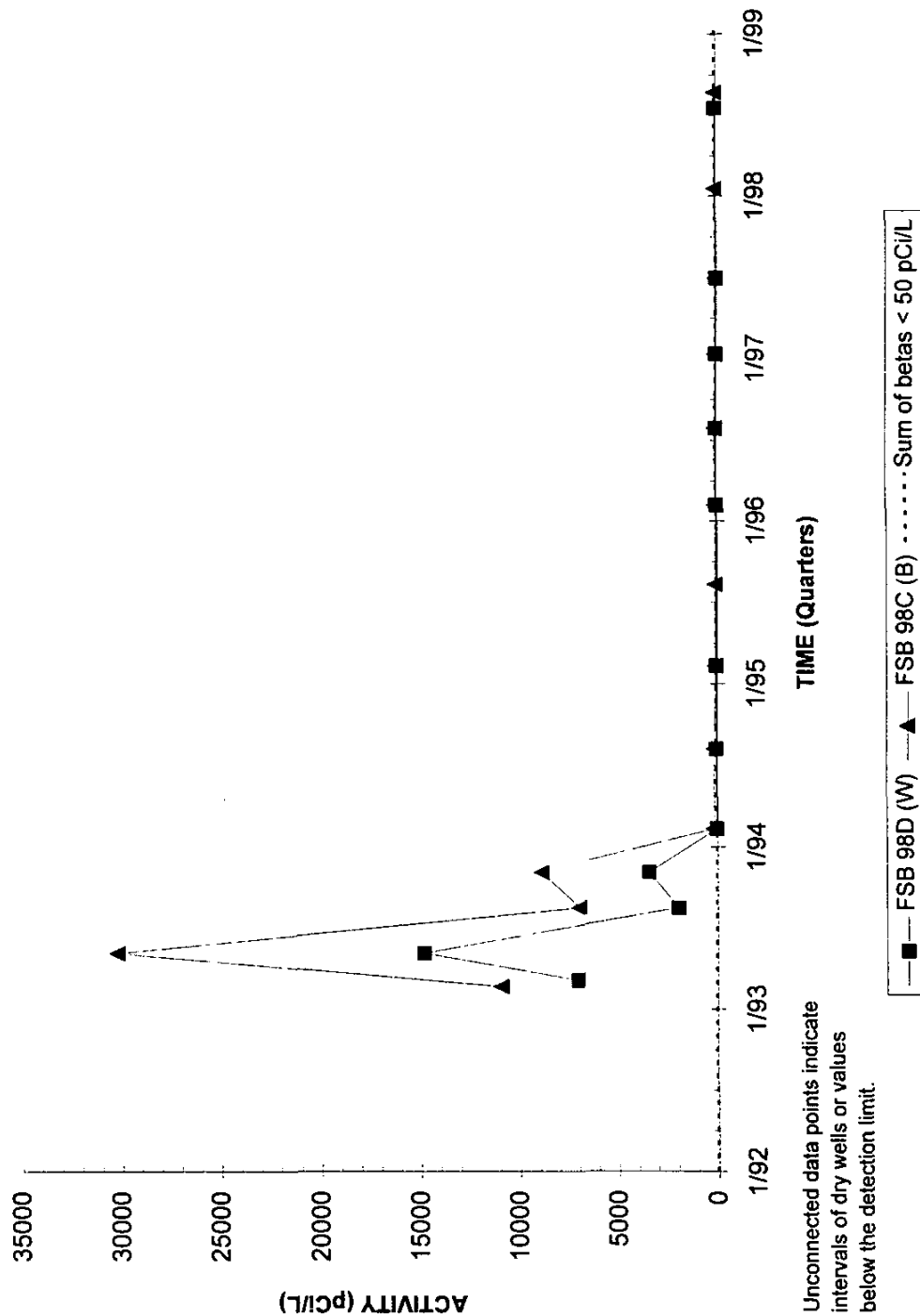
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 74

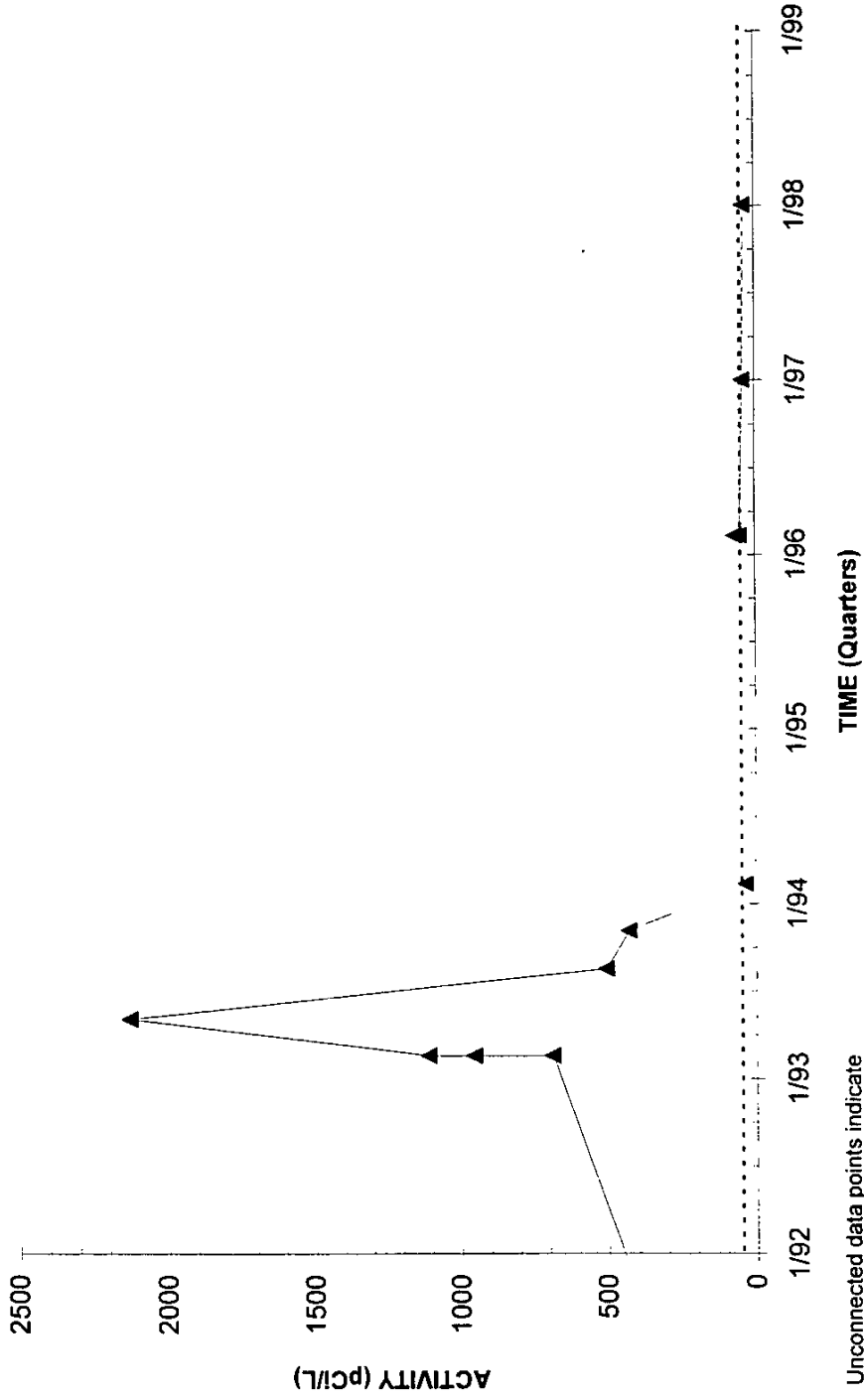
Third and Fourth Quarter 1998

## Technetium-99 Activities Well Cluster FSB 98



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Technetium-99 Activities Well FSB102C



Unconnected data points indicate intervals of dry wells or values below the detection limit.

▲ FSB102C (B) ..... Sum of betas < 50 pCi/L

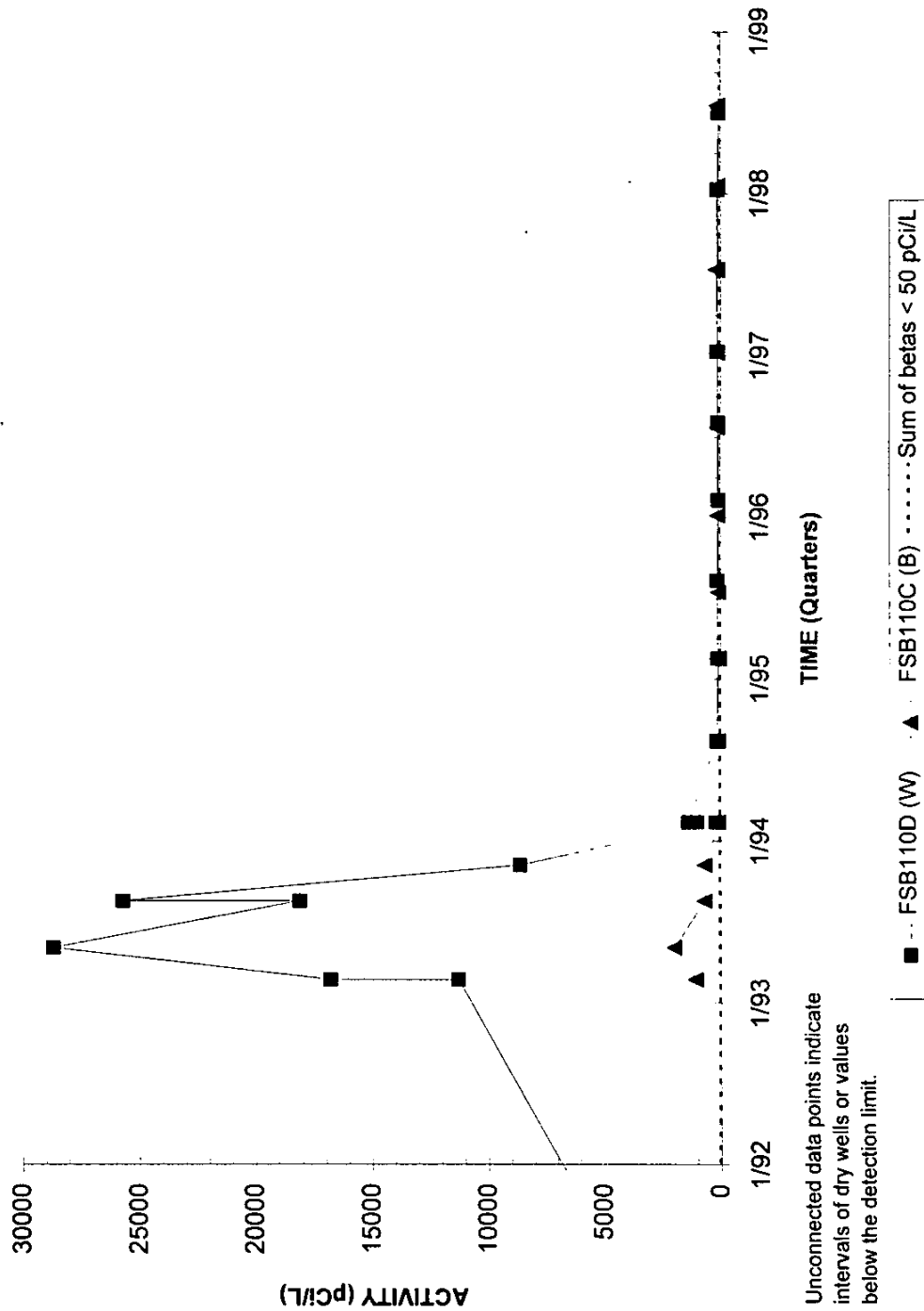
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 76

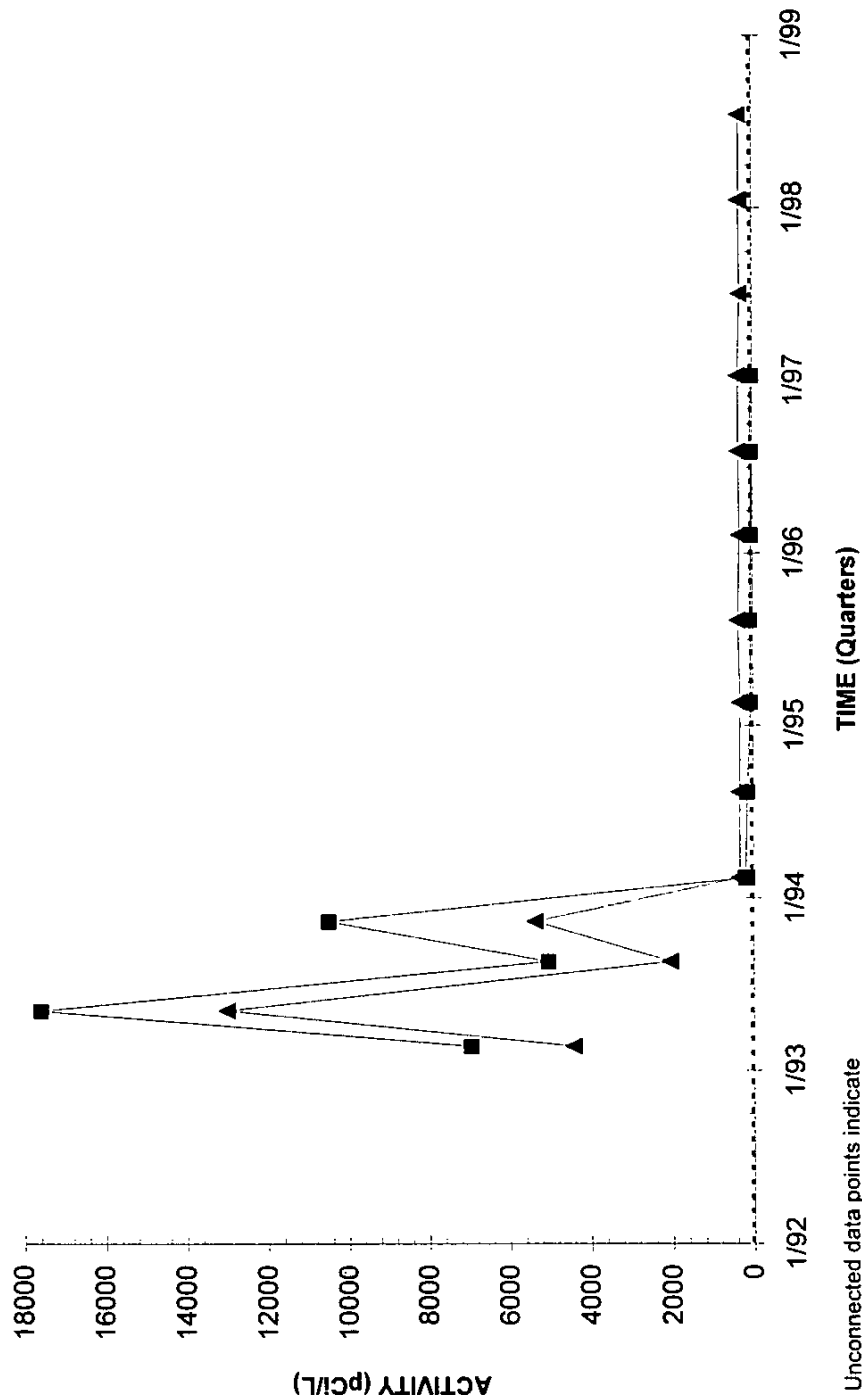
Third and Fourth Quarter 1998

## Technetium-99 Activities Well Cluster FSB110



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Technetium-99 Activities Well Cluster FSB112



Unconnected data points indicate intervals of dry wells or values below the detection limit.

Legend: ■ FSB112D (W) ▲ FSB112C (B) ..... Sum of betas < 50 pCi/L

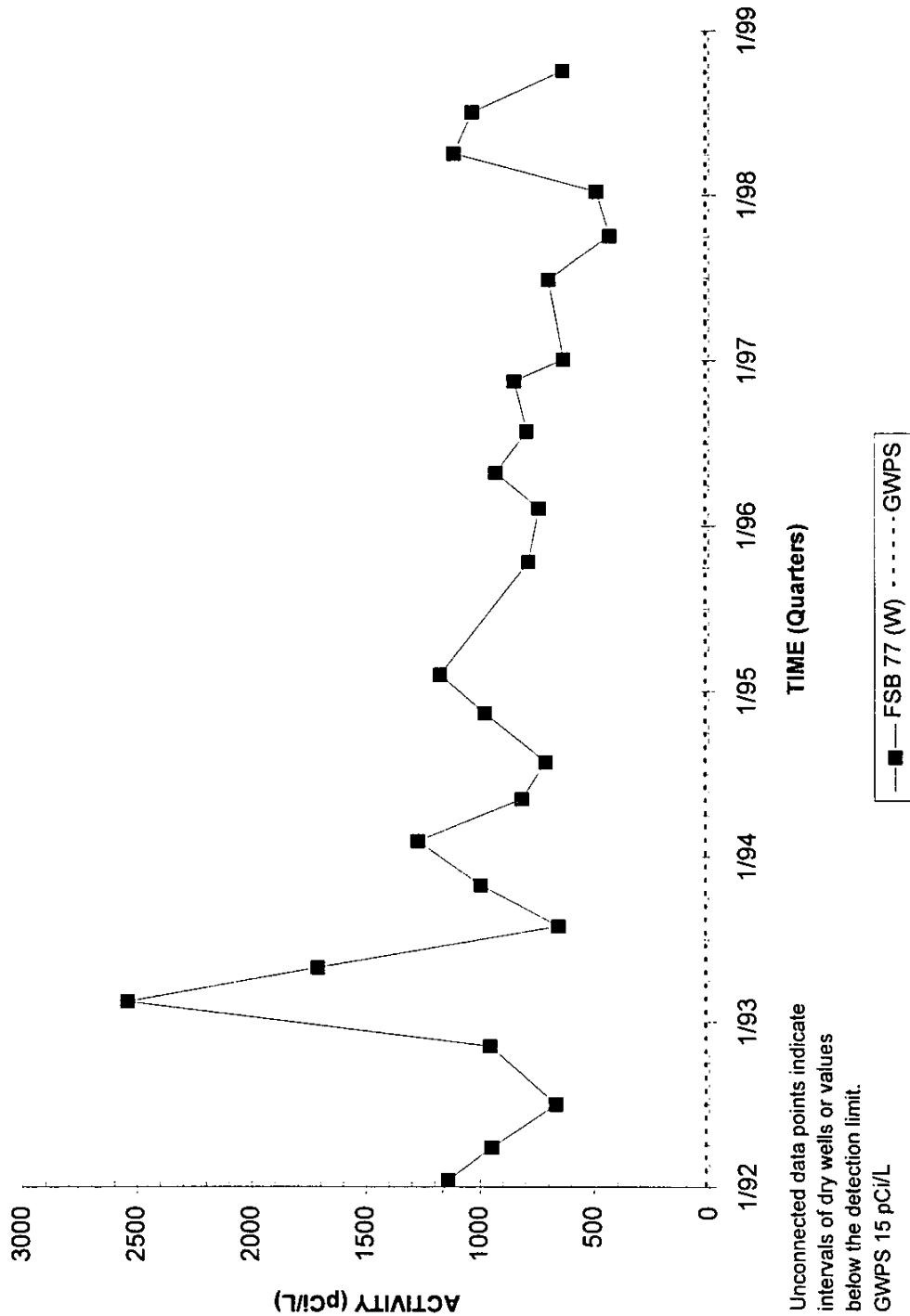
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 78

Third and Fourth Quarter 1998

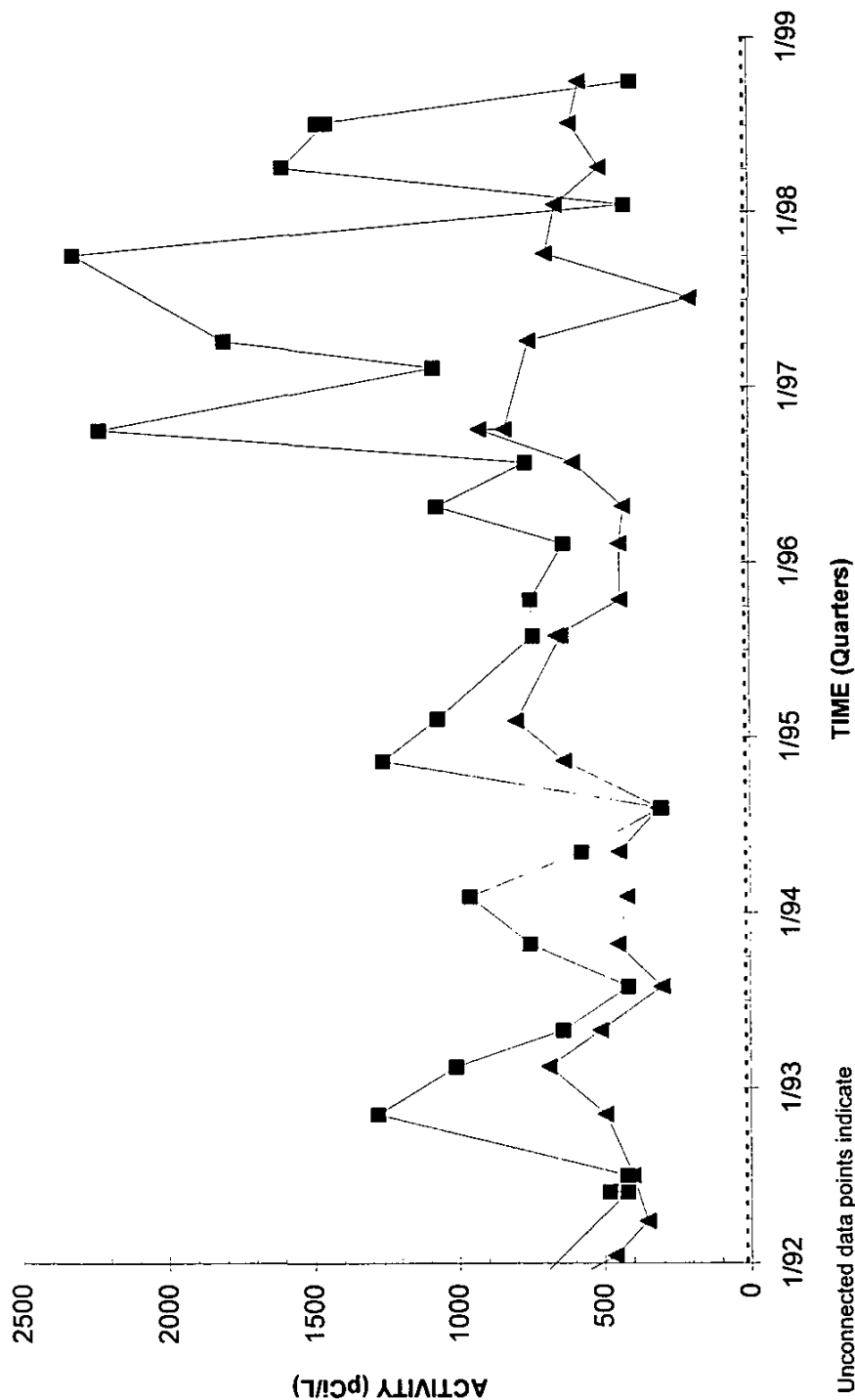
## Gross Alpha Activities Well FSB 77



Note: W=Water Table (11B2); B=Barnwell (11B1); M=McBean (11B1); UC=Upper Congaree (11A); MC=Middle Congaree (11A); LC=Lower Congaree (11A)



# Gross Alpha Activities Well Cluster FSB 79



Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 15 pCi/L

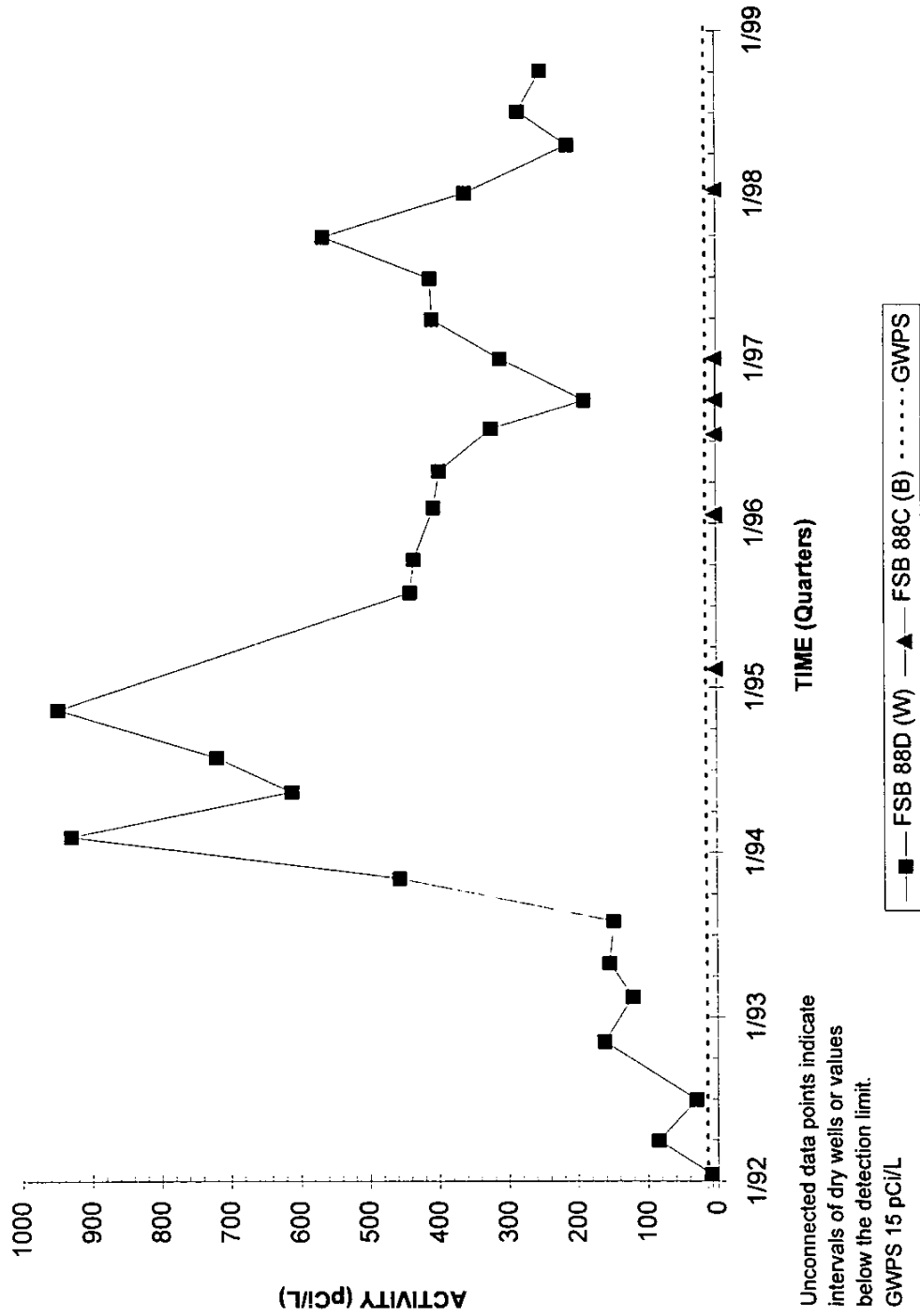
Note: W=Water Table (IB2), B=Barnwell (IB1), M=McBean (IB1), UC=Upper Congaree (IIA), MC=Middle Congaree (IIA), LC=Lower Congaree (IIA)

F-Area HWMF

D - 80

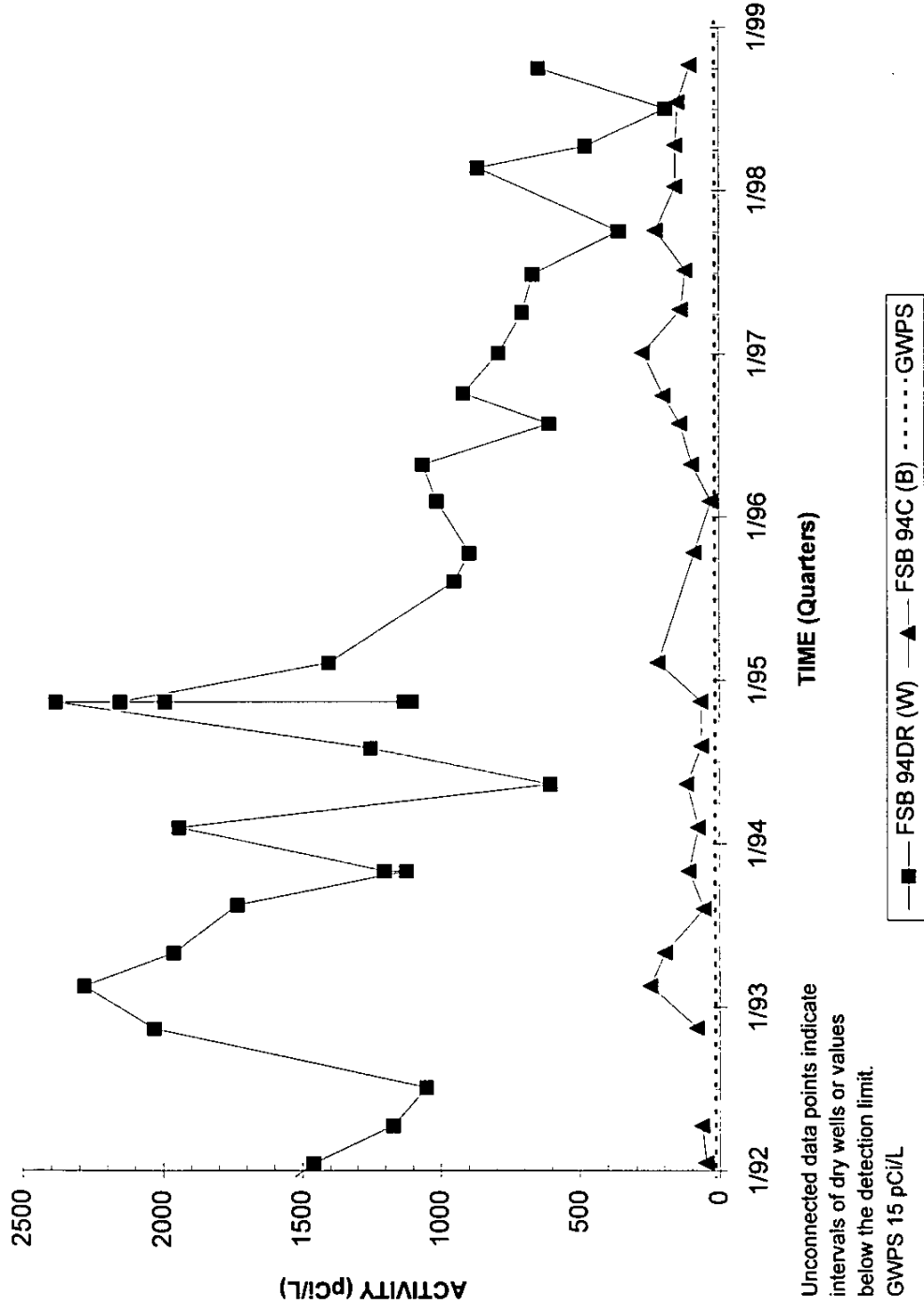
Third and Fourth Quarter 1998

## Gross Alpha Activities Well Cluster FSB 88



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Gross Alpha Activities Well Cluster FSB 94



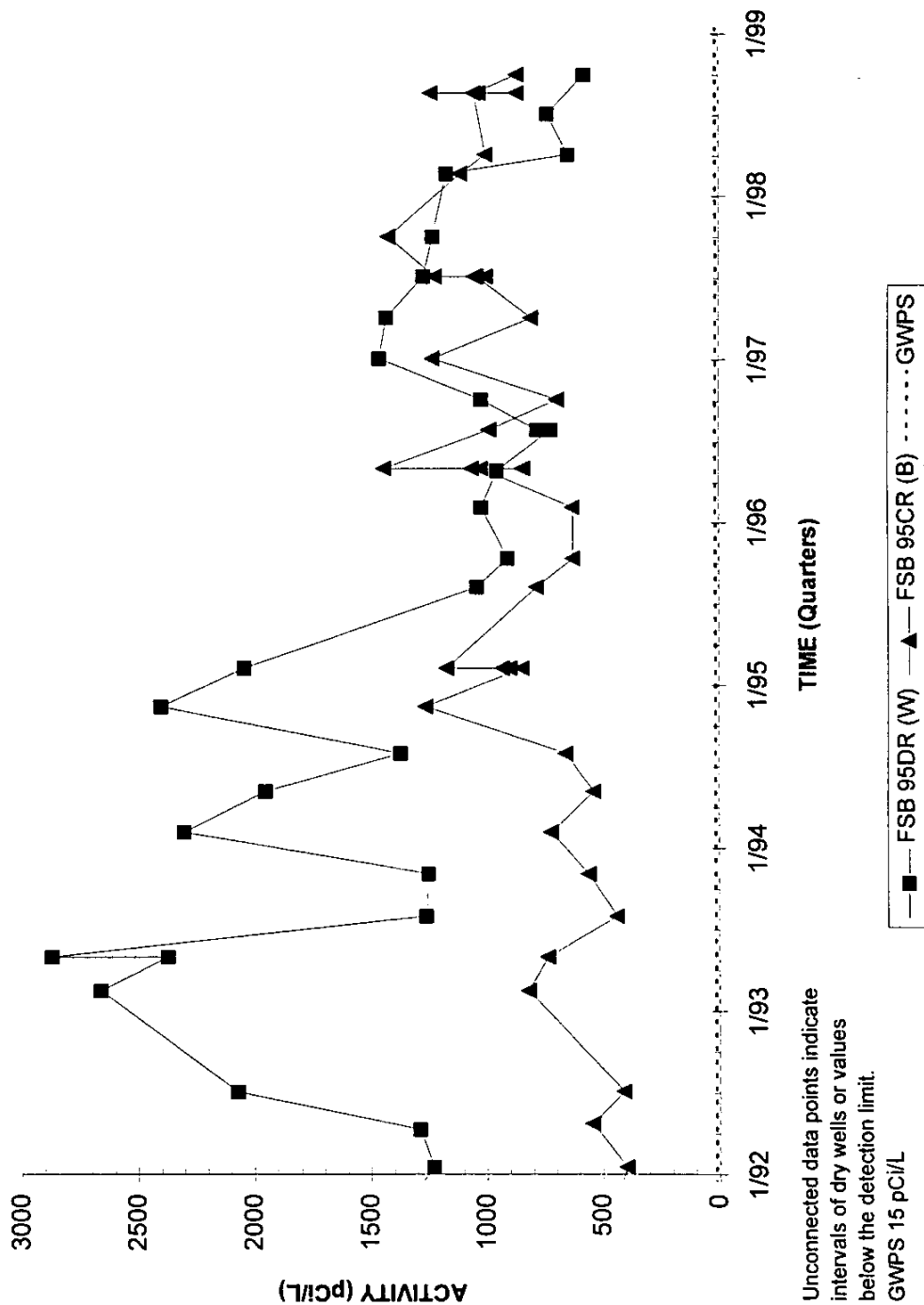
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 82

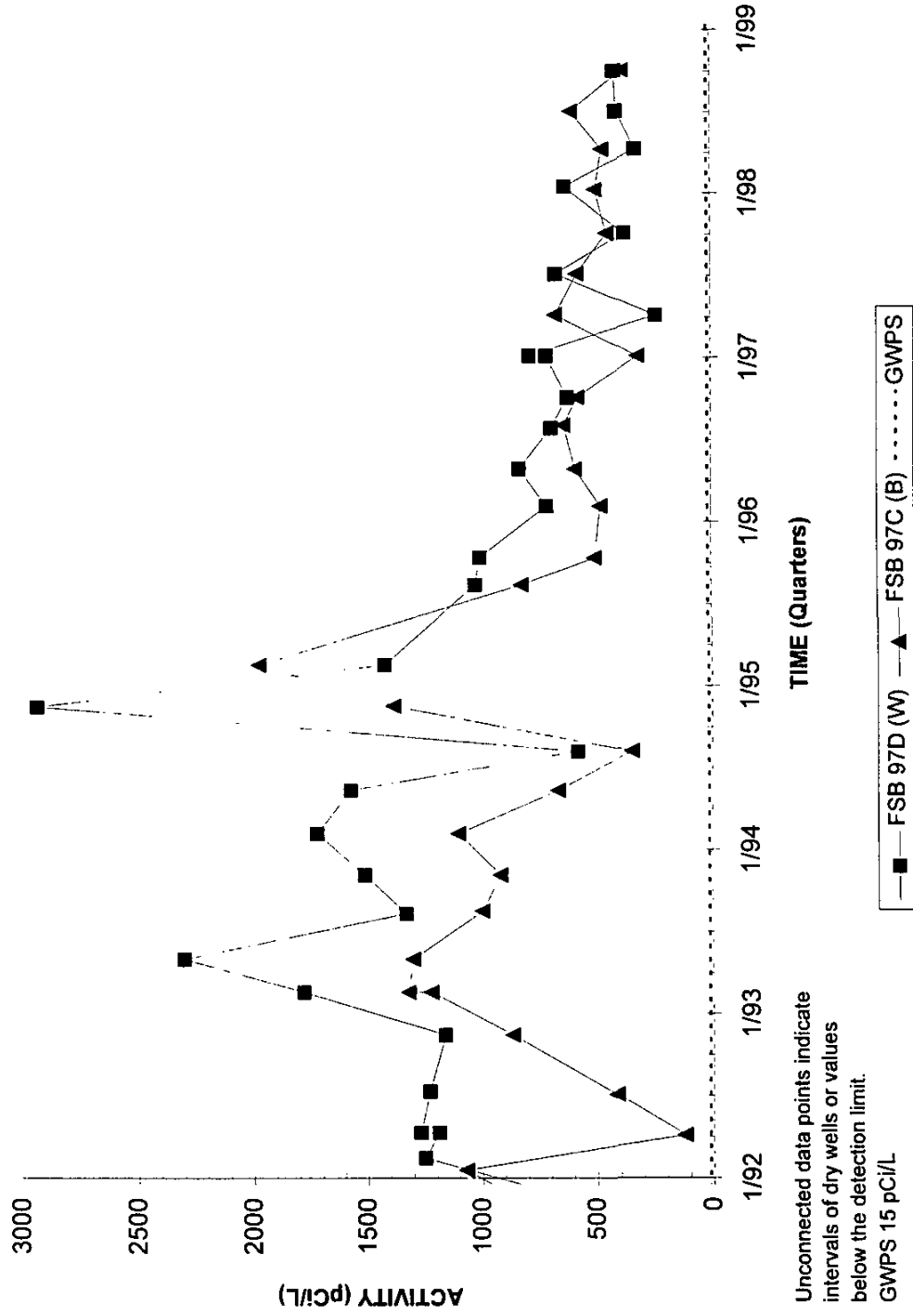
Third and Fourth Quarter 1998

## Gross Alpha Activities Well Cluster FSB 95



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Gross Alpha Activities Well Cluster FSB 97



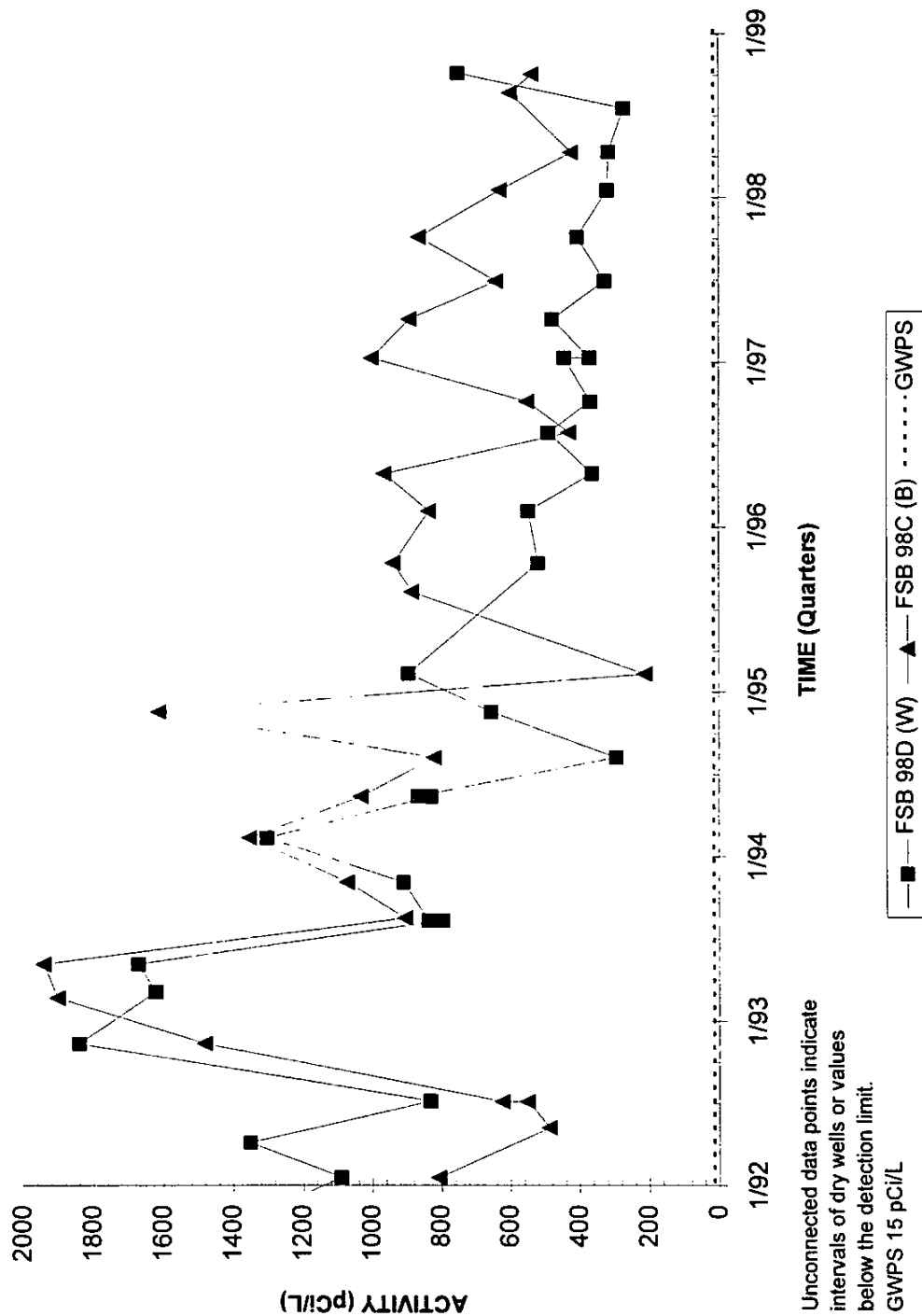
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HMMF

D - 84

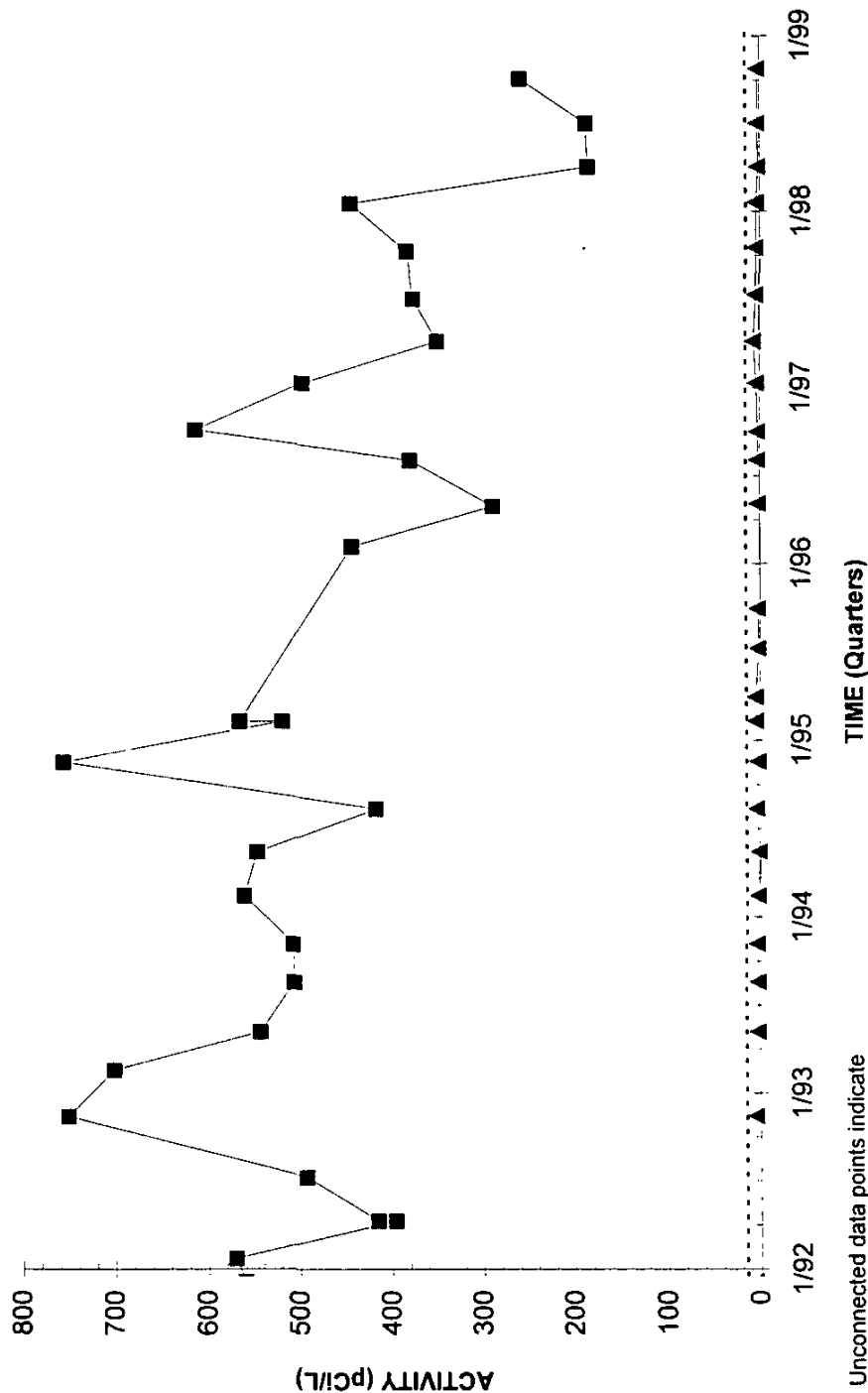
Third and Fourth Quarter 1998

## Gross Alpha Activities Well Cluster FSB 98



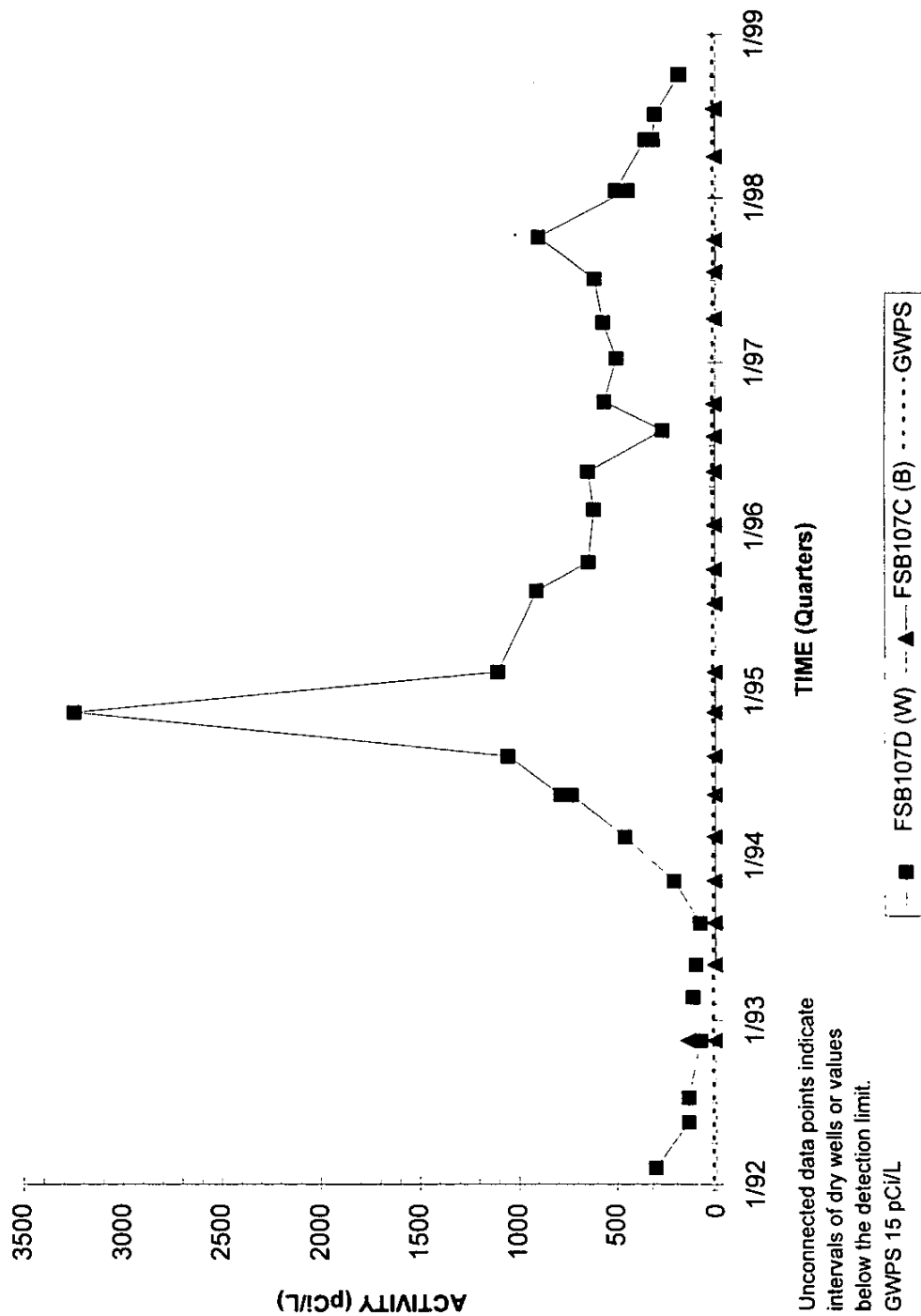
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Gross Alpha Activities Well Cluster FSB104



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

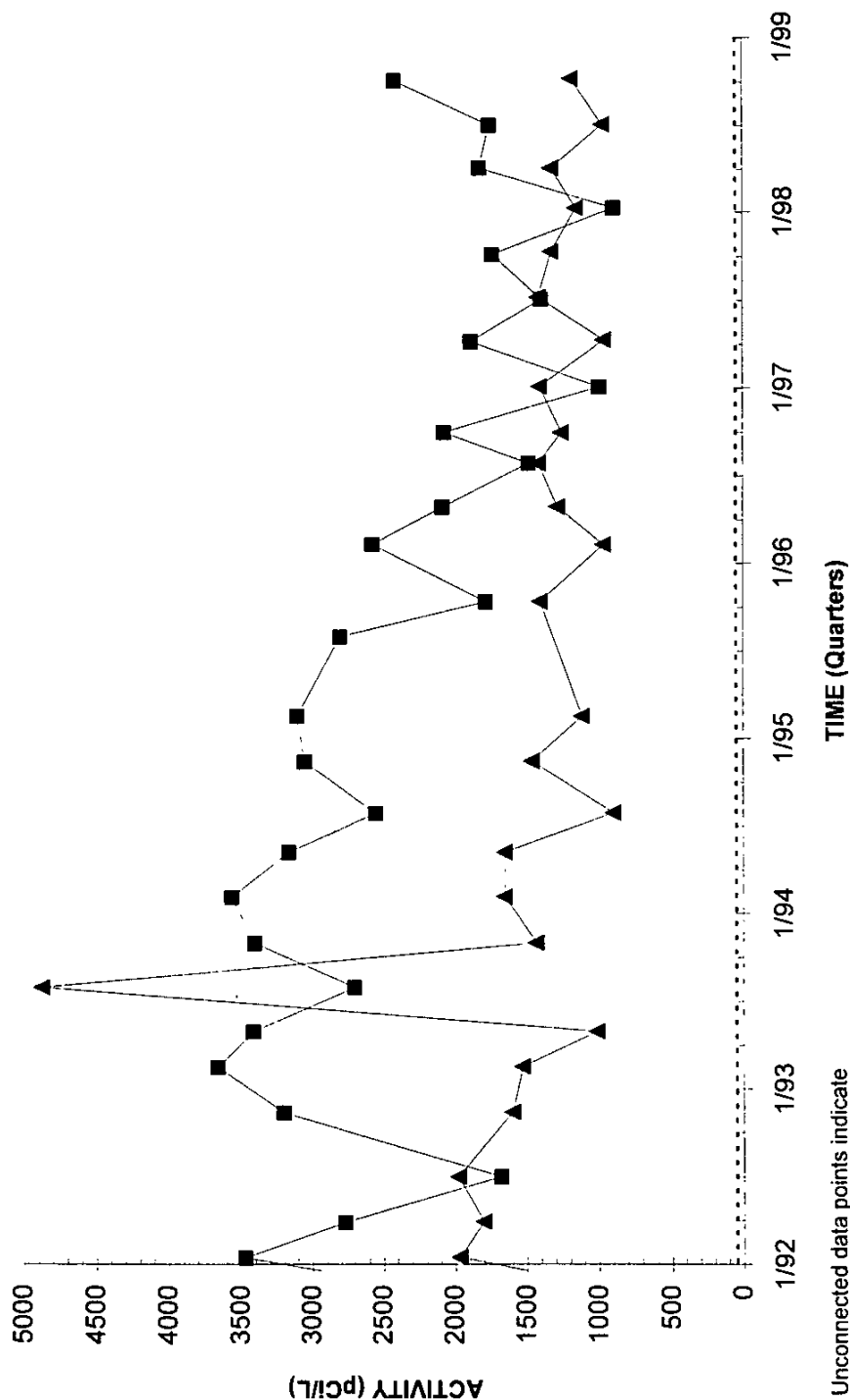
## Gross Alpha Activities Well Cluster FSB107



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



## Nonvolatile Beta Activities Well Cluster FSB 78



Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 50 pCi/L

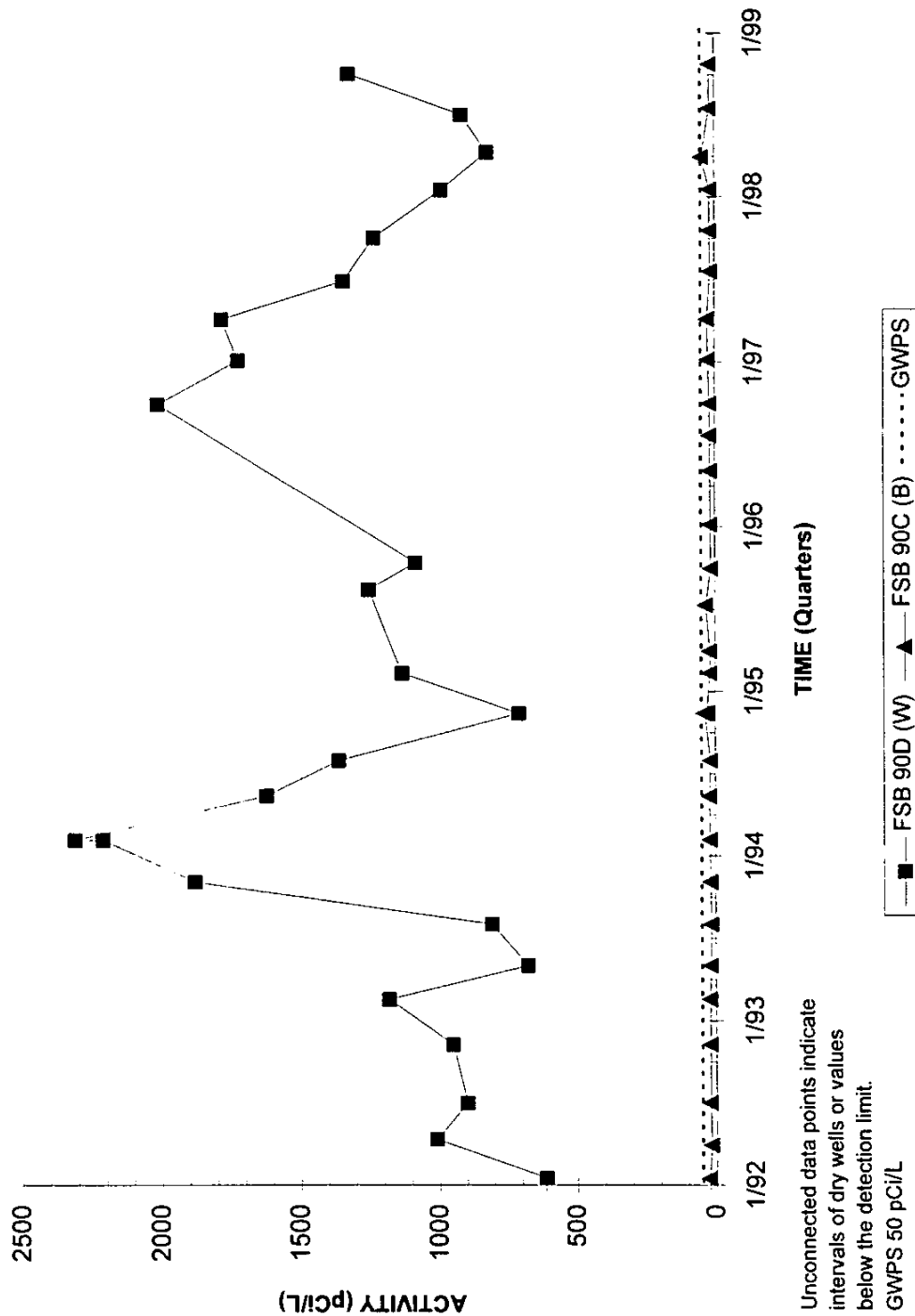
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 88

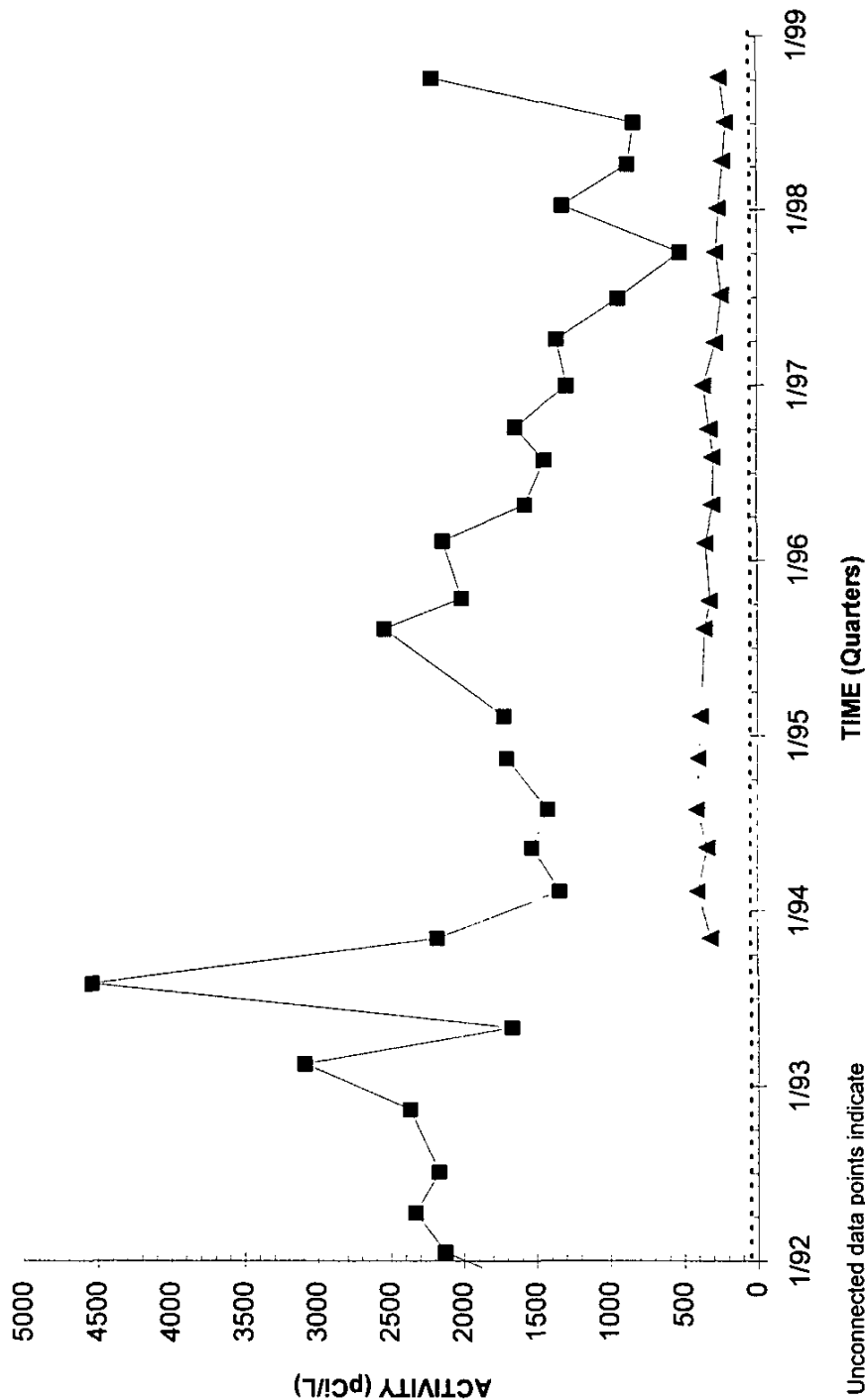
Third and Fourth Quarter 1998

## Nonvolatile Beta Activities Well Cluster FSB 90



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Nonvolatile Beta Activities Well Cluster FSB 92



Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 50 pCi/L

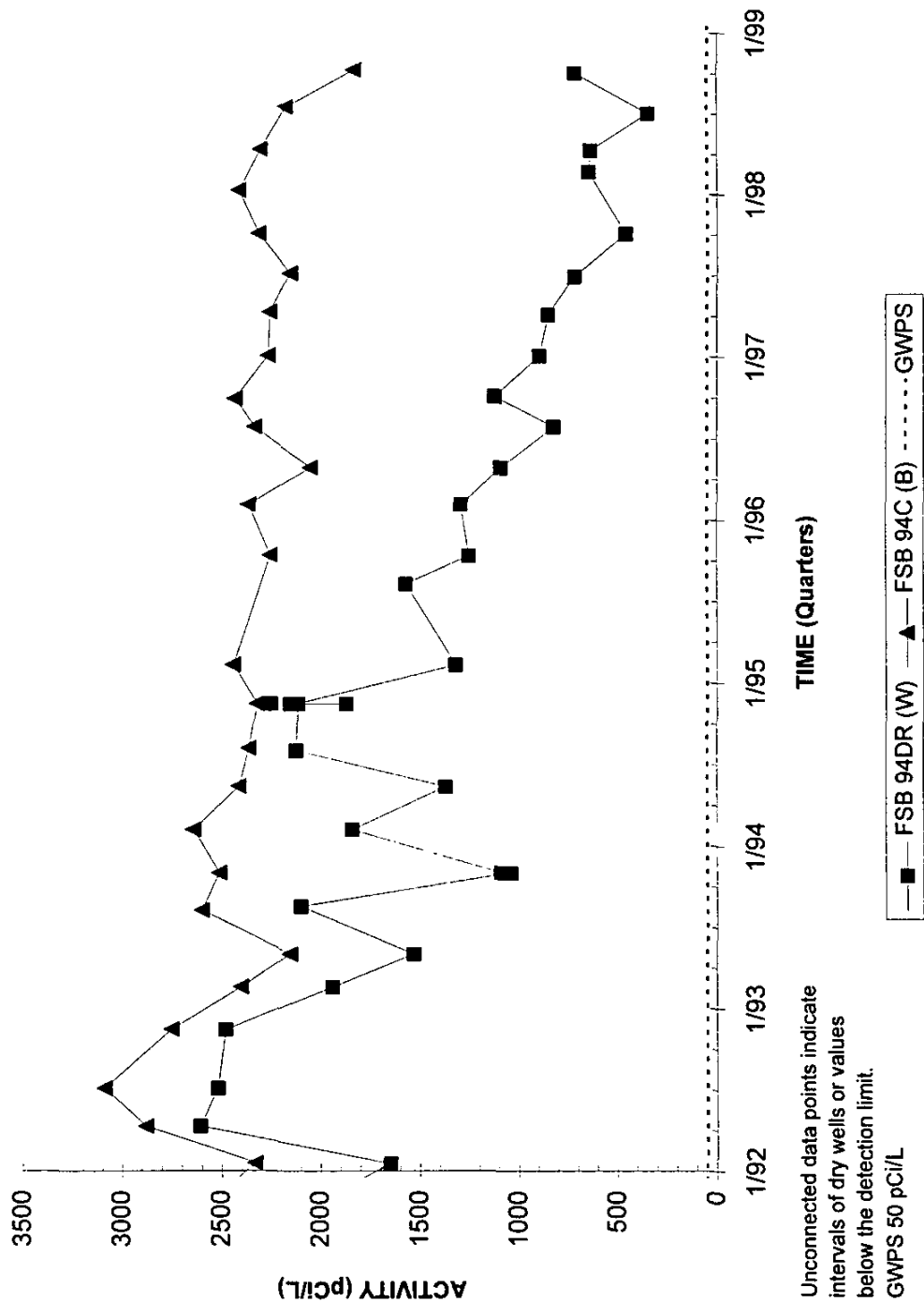
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 90

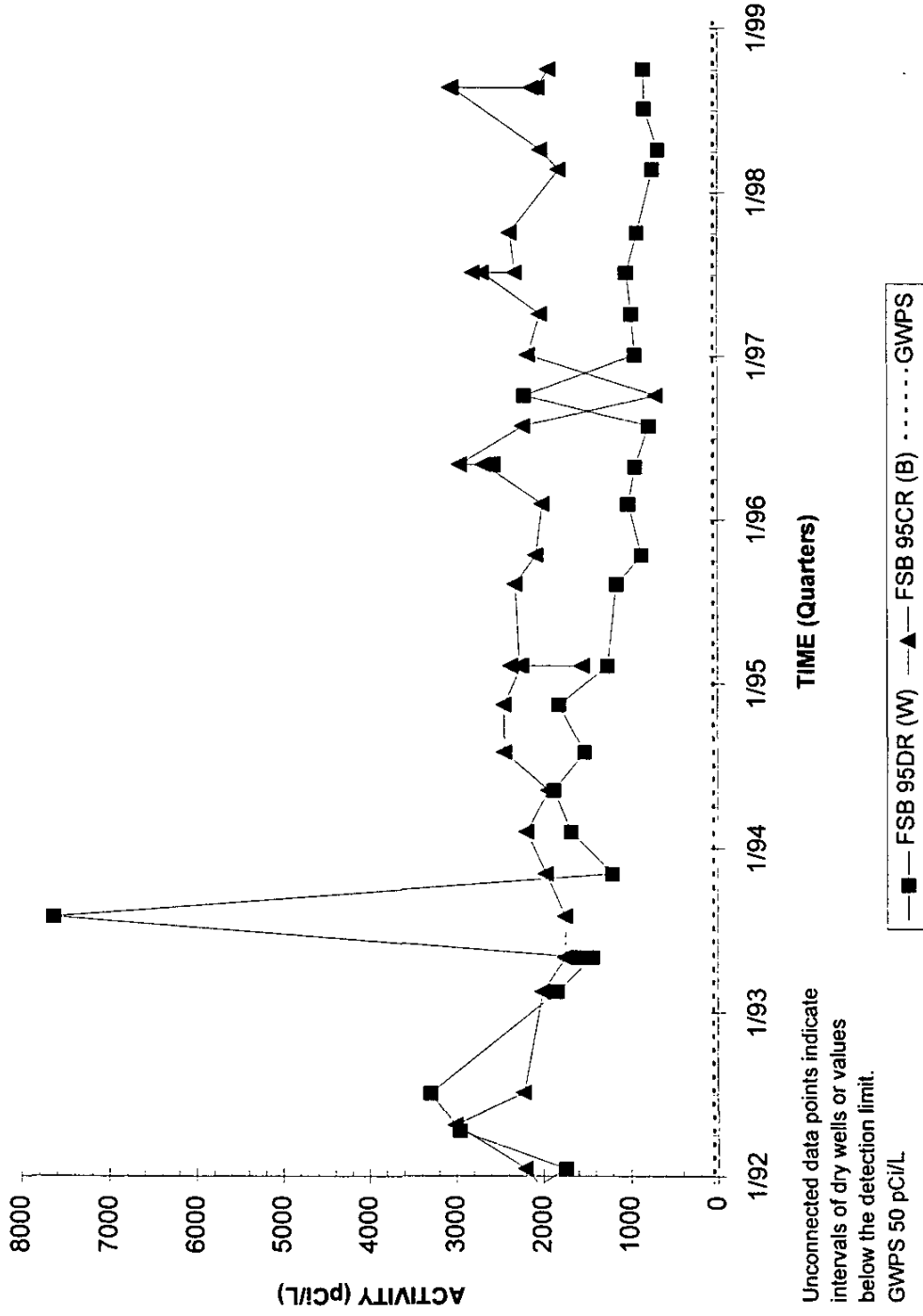
Third and Fourth Quarter 1998

## Nonvolatile Beta Activities Well Cluster FSB 94



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Nonvolatile Beta Activities Well Cluster FSB 95



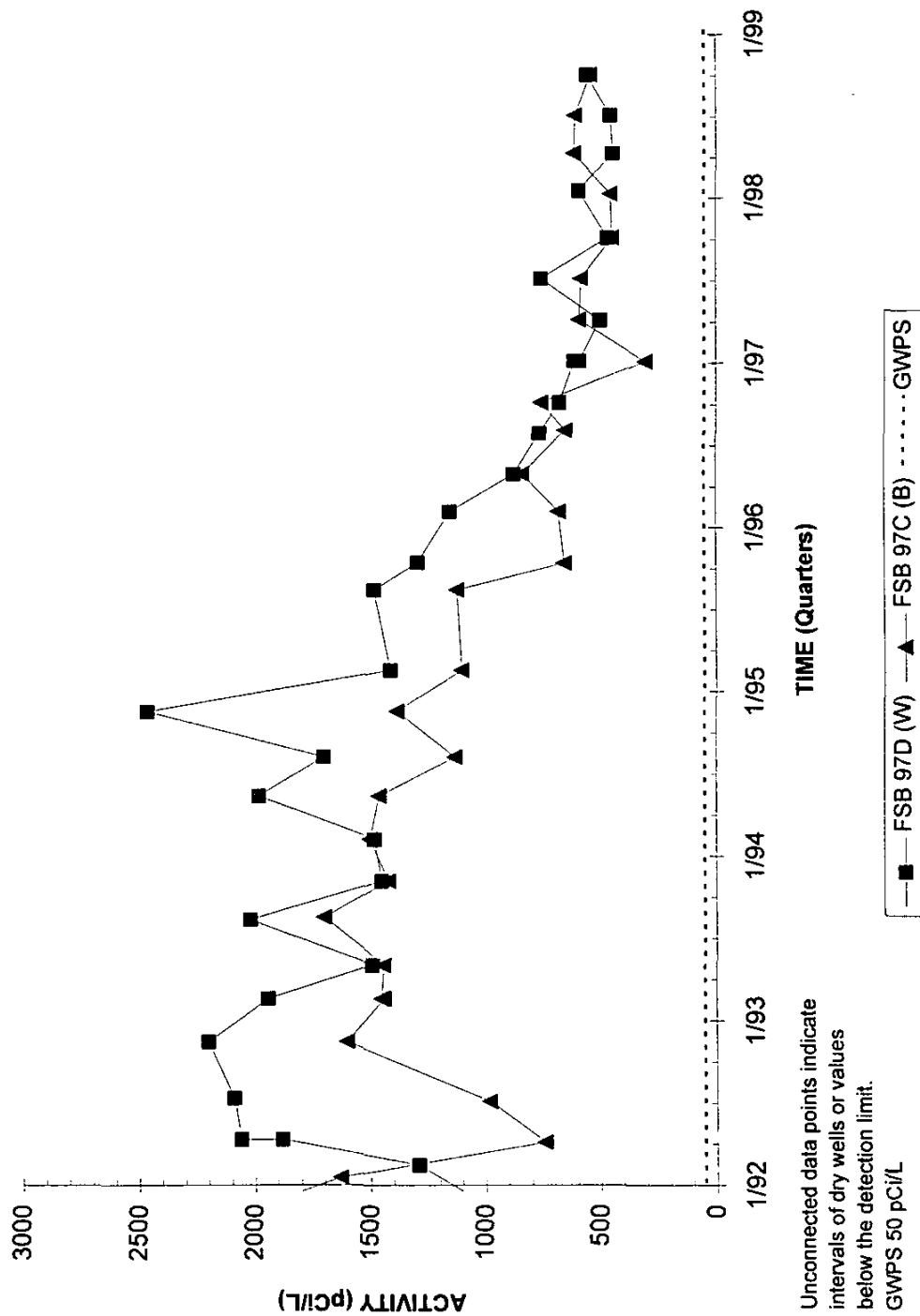
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 92

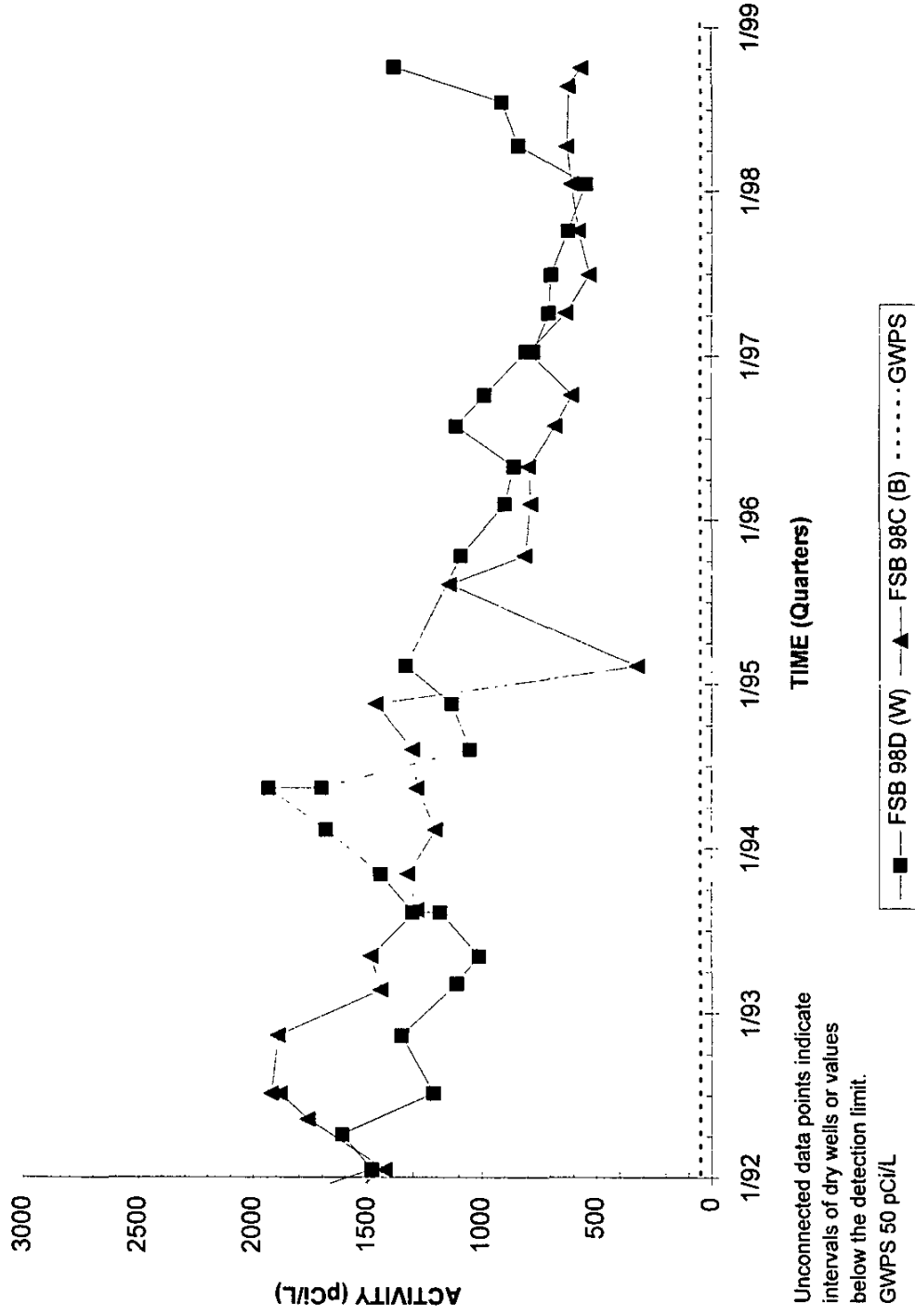
Third and Fourth Quarter 1998

# Nonvolatile Beta Activities Well Cluster FSB 97



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

## Nonvolatile Beta Activities Well Cluster FSB 98



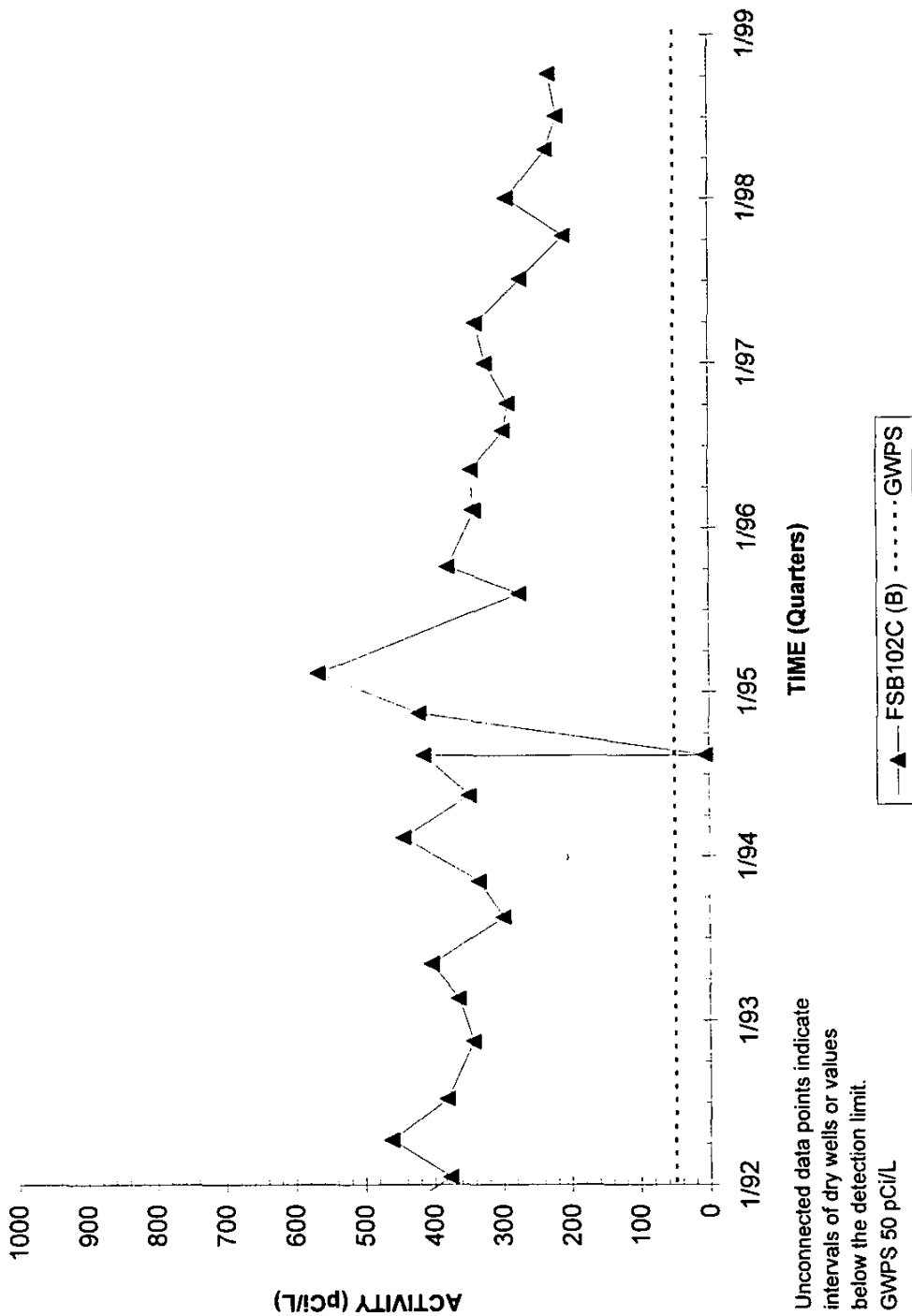
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 94

Third and Fourth Quarter 1998

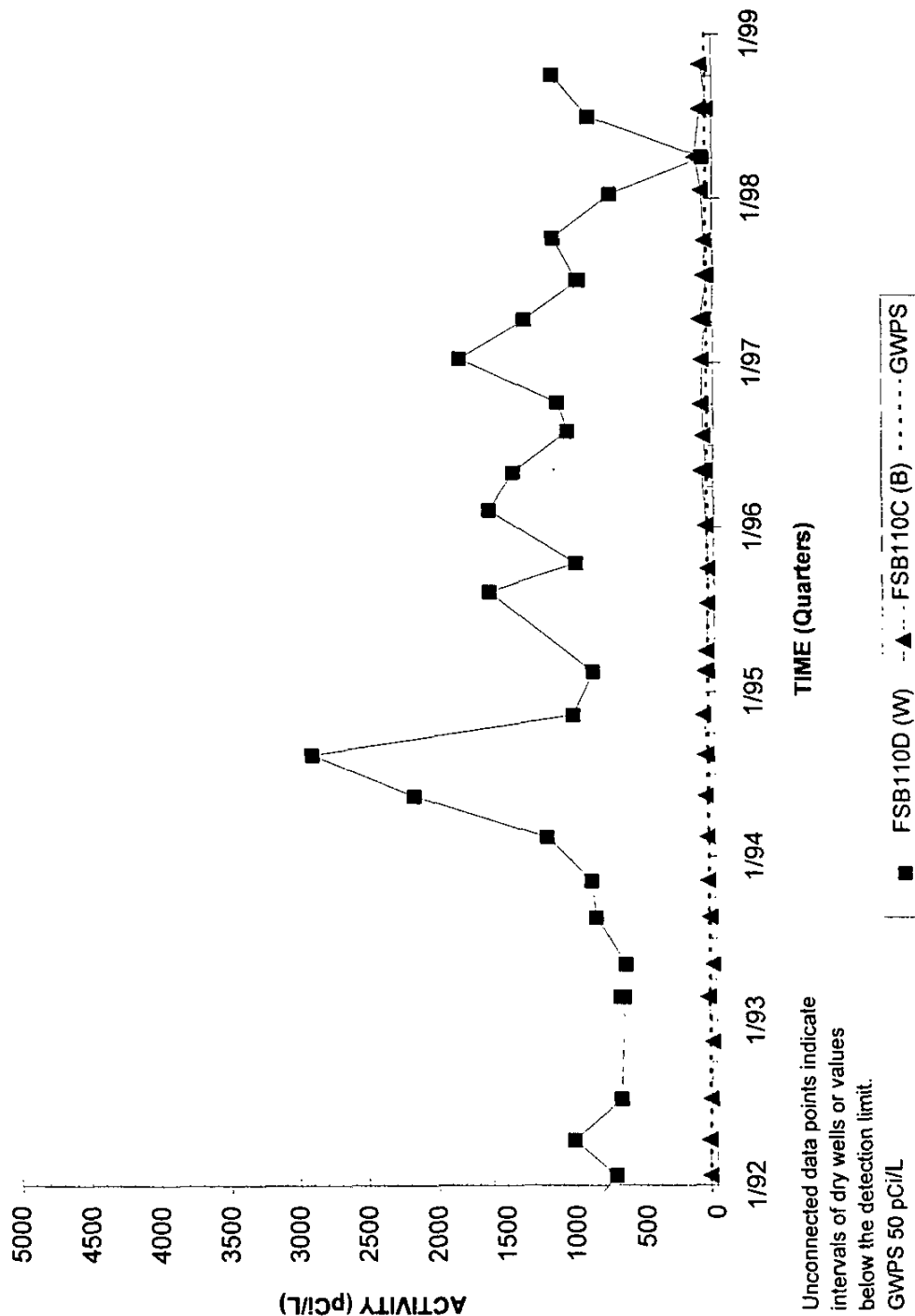
## Nonvolatile Beta Activities Well FSB102C



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



## Nonvolatile Beta Activities Well Cluster FSB110



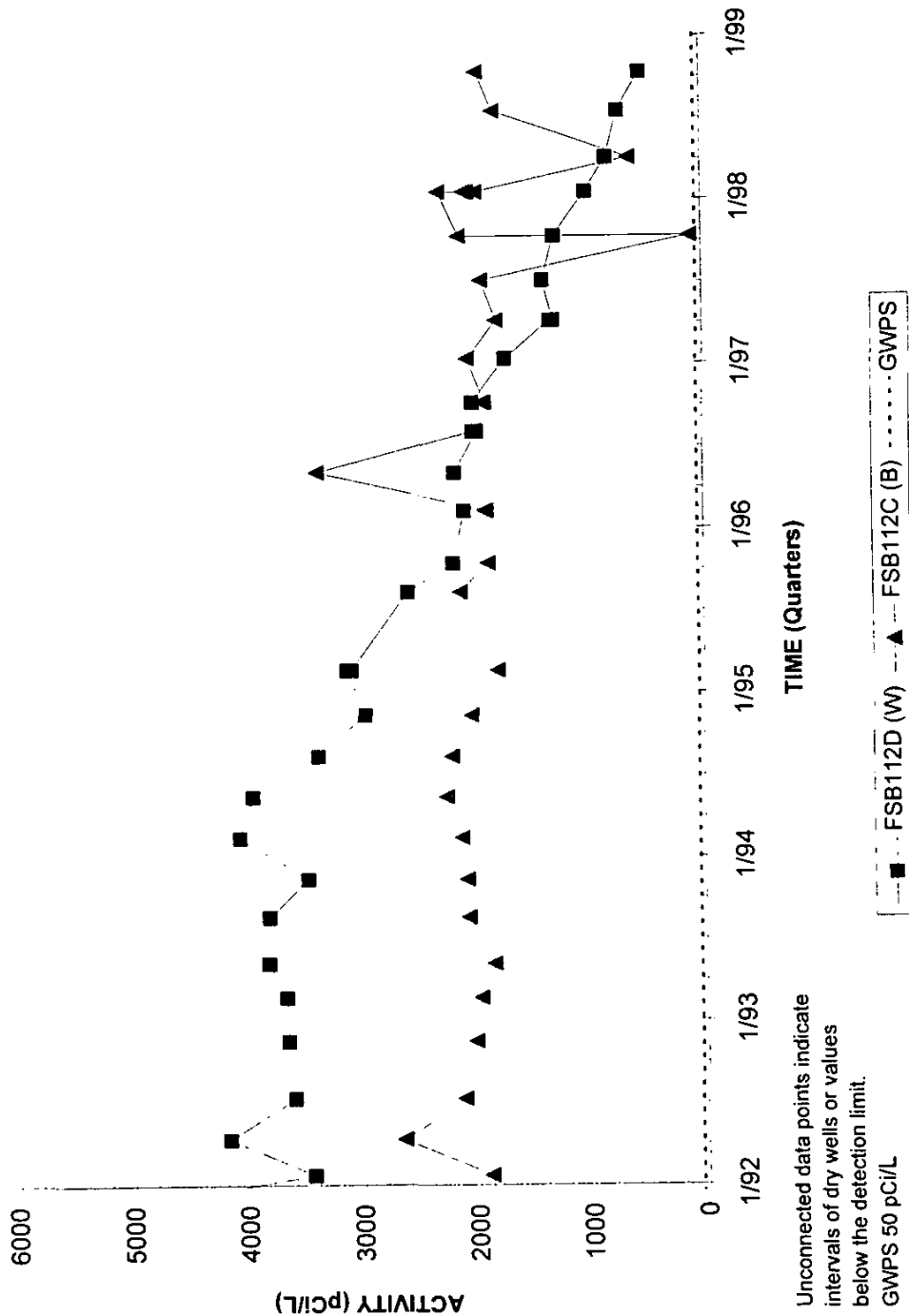
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

D - 96

Third and Fourth Quarter 1998

## Nonvolatile Beta Activities Well Cluster FSB112



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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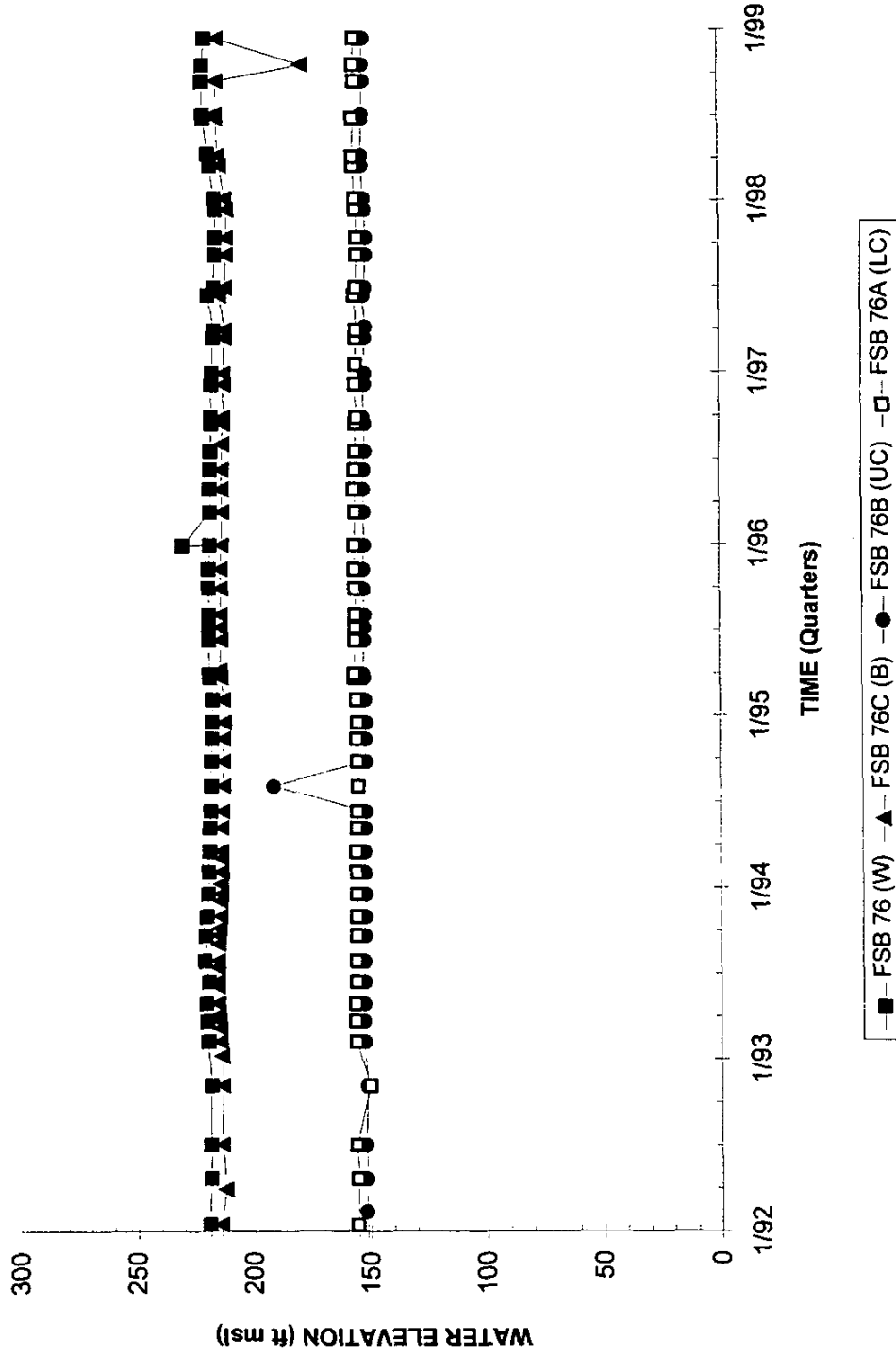
## **Appendix E**

### **Hydrographs**

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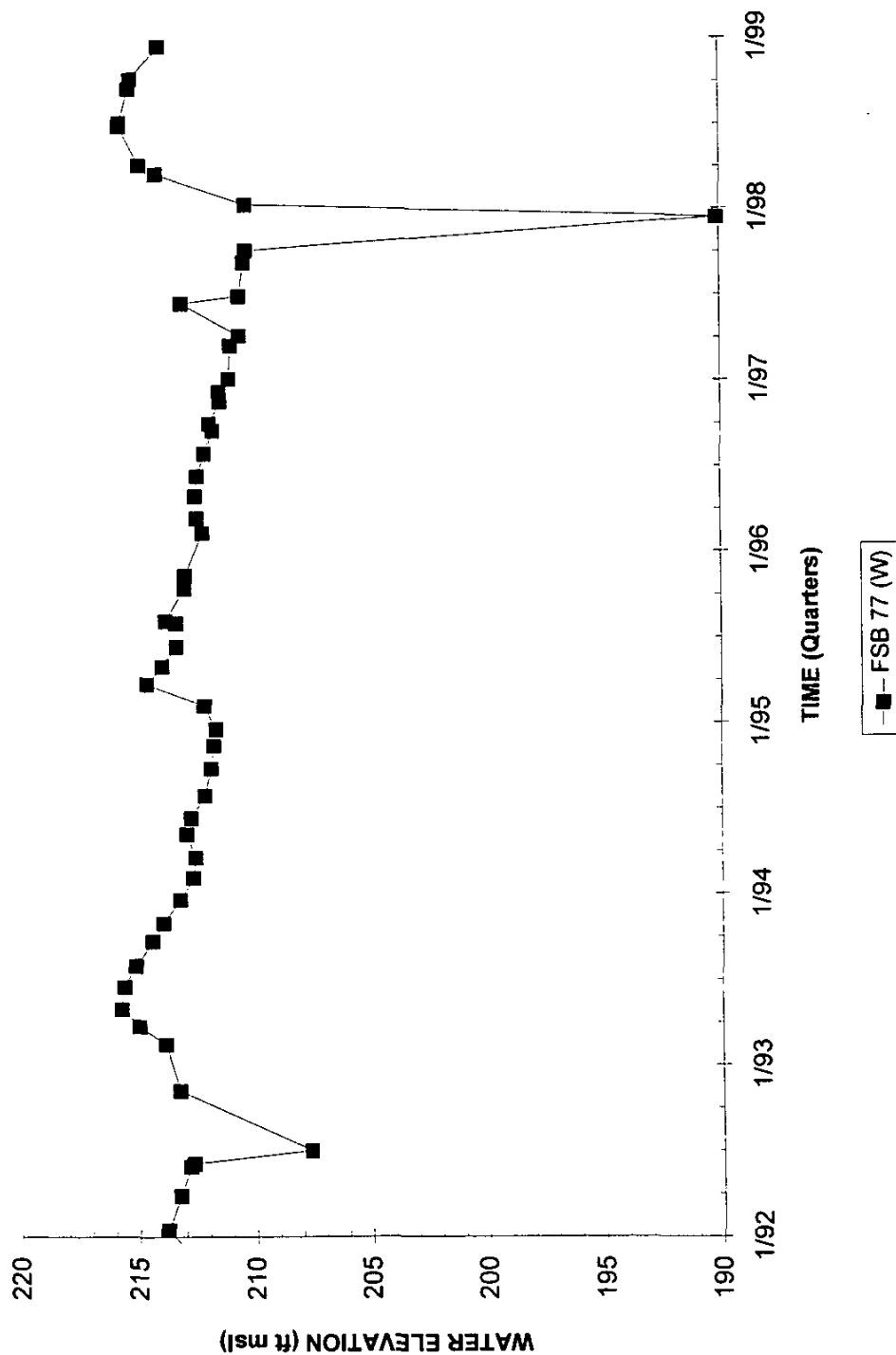
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# Hydrograph Well Cluster FSB 76



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSB 77



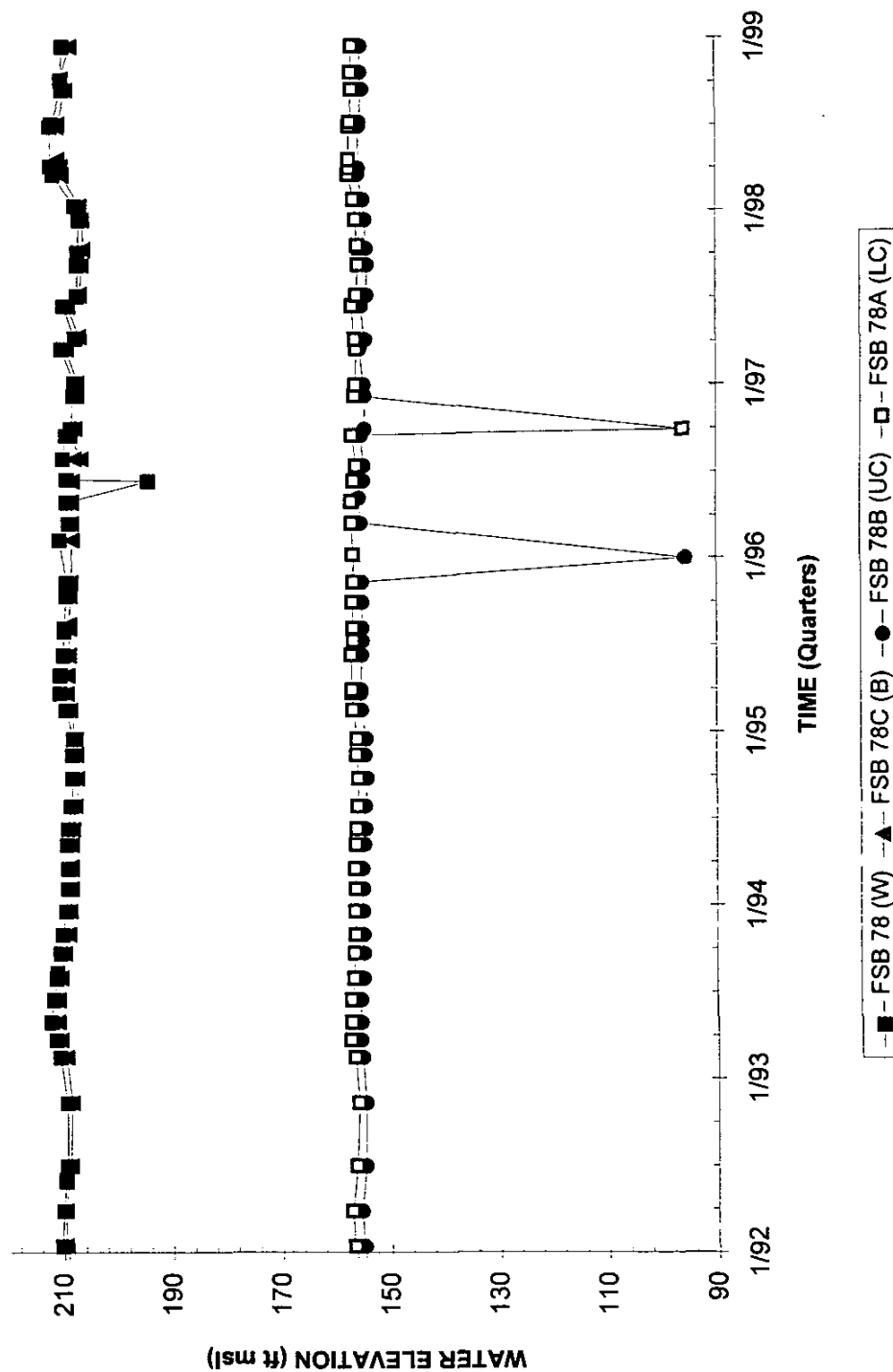
Note: W=Water Table (IIB2); B=Bamwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 4

Third and Fourth Quarter 1998

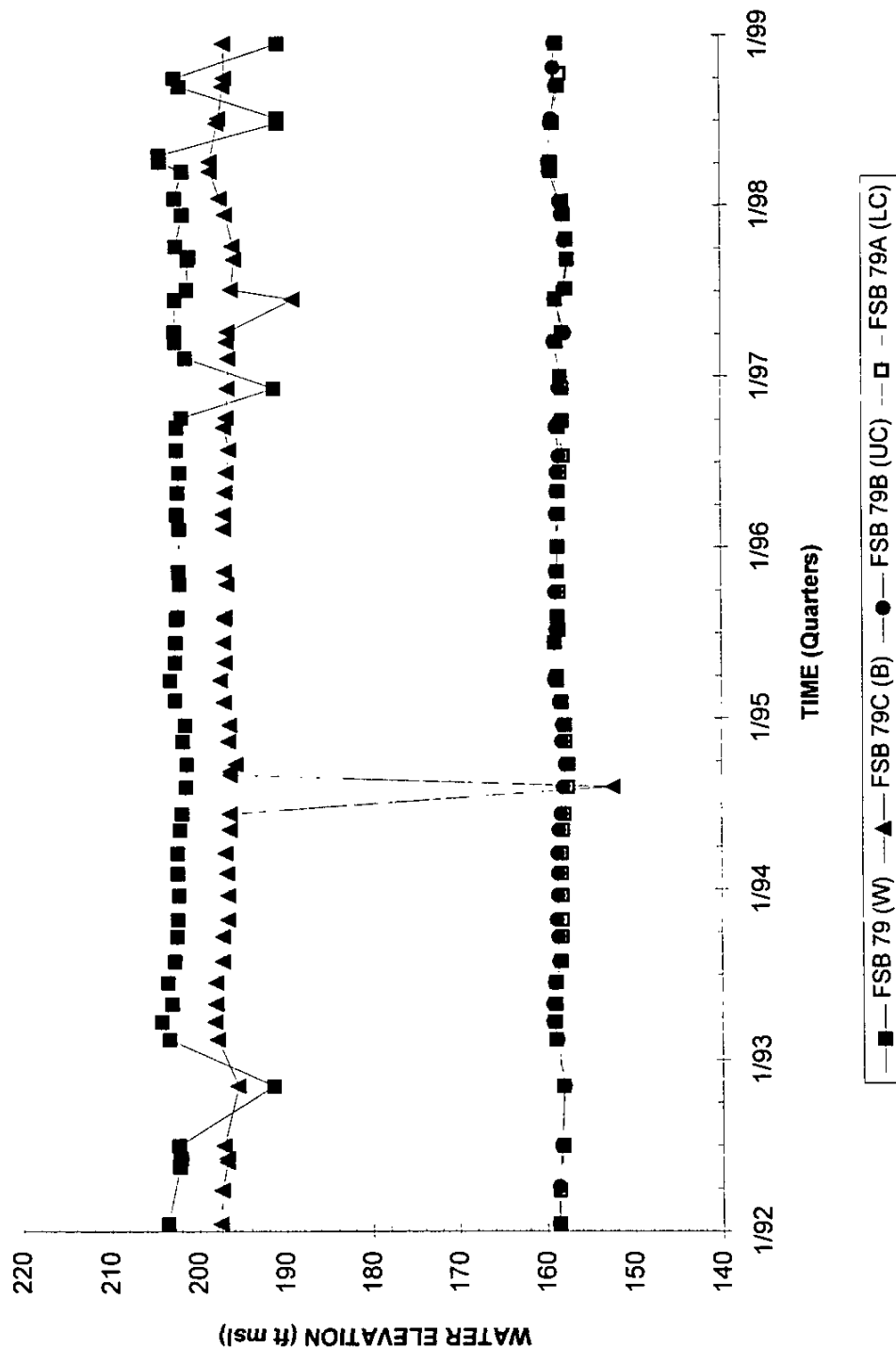
## Hydrograph Well Cluster FSB 78



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Hydrograph Well Cluster FSB 79



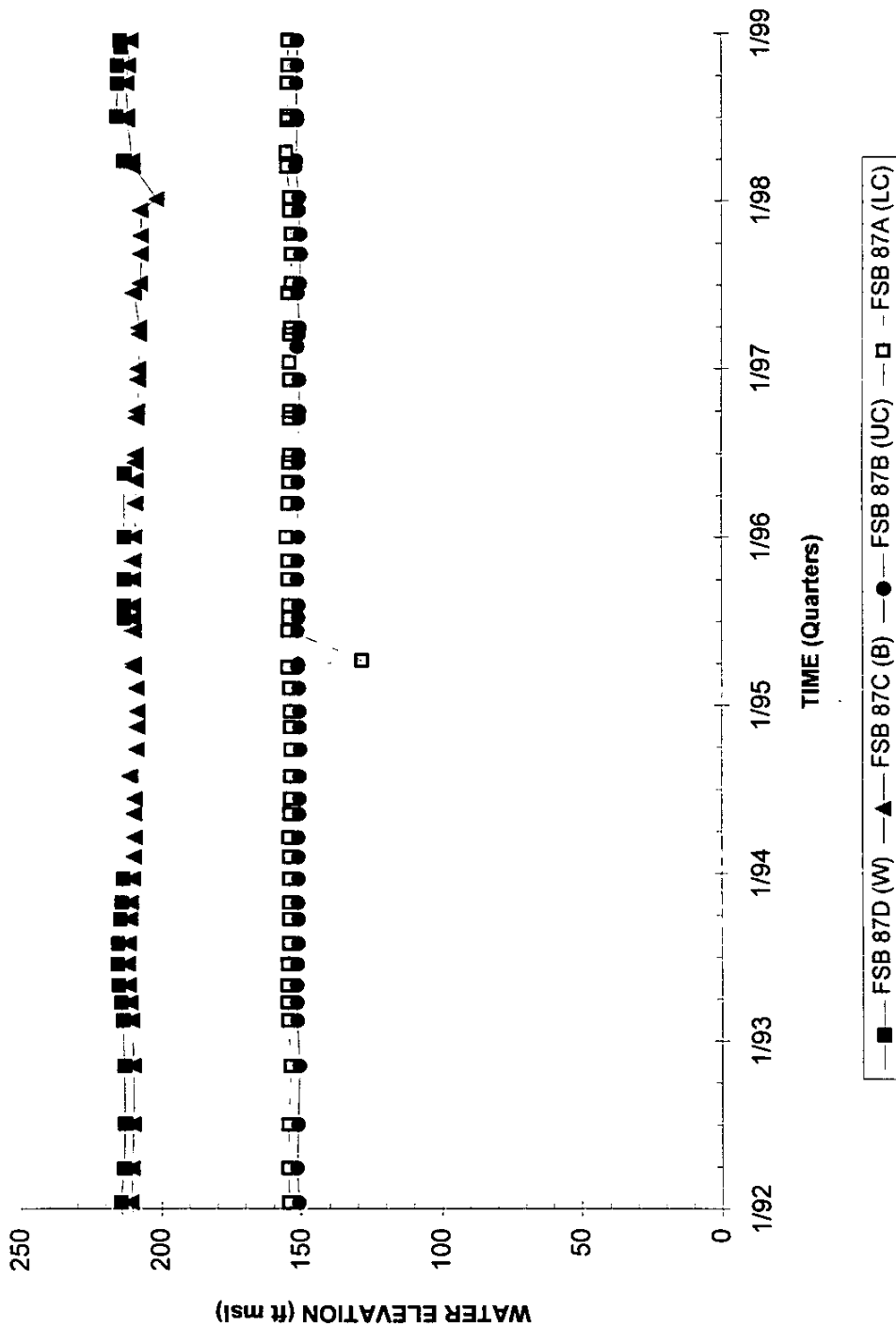
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 6

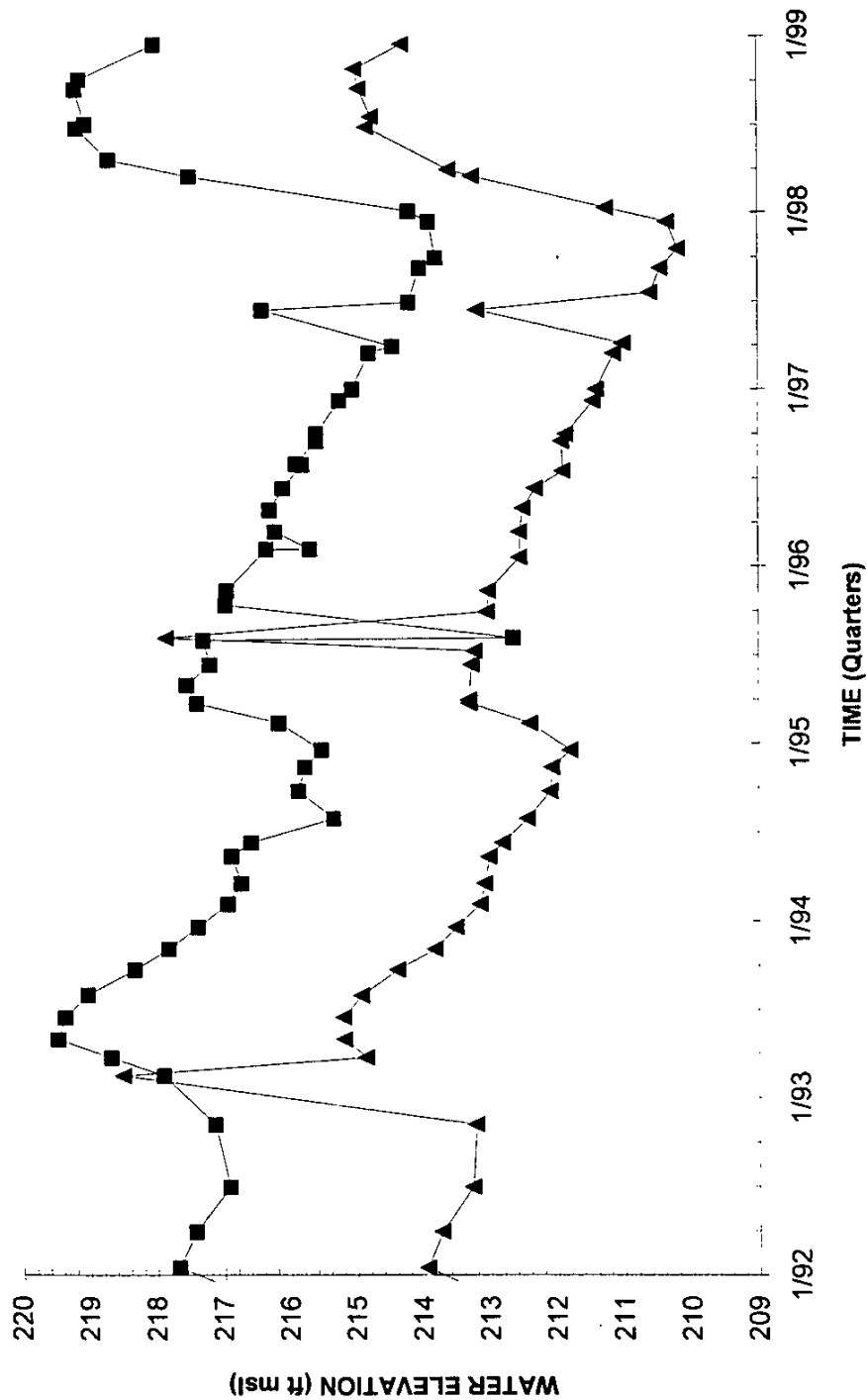
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB 87



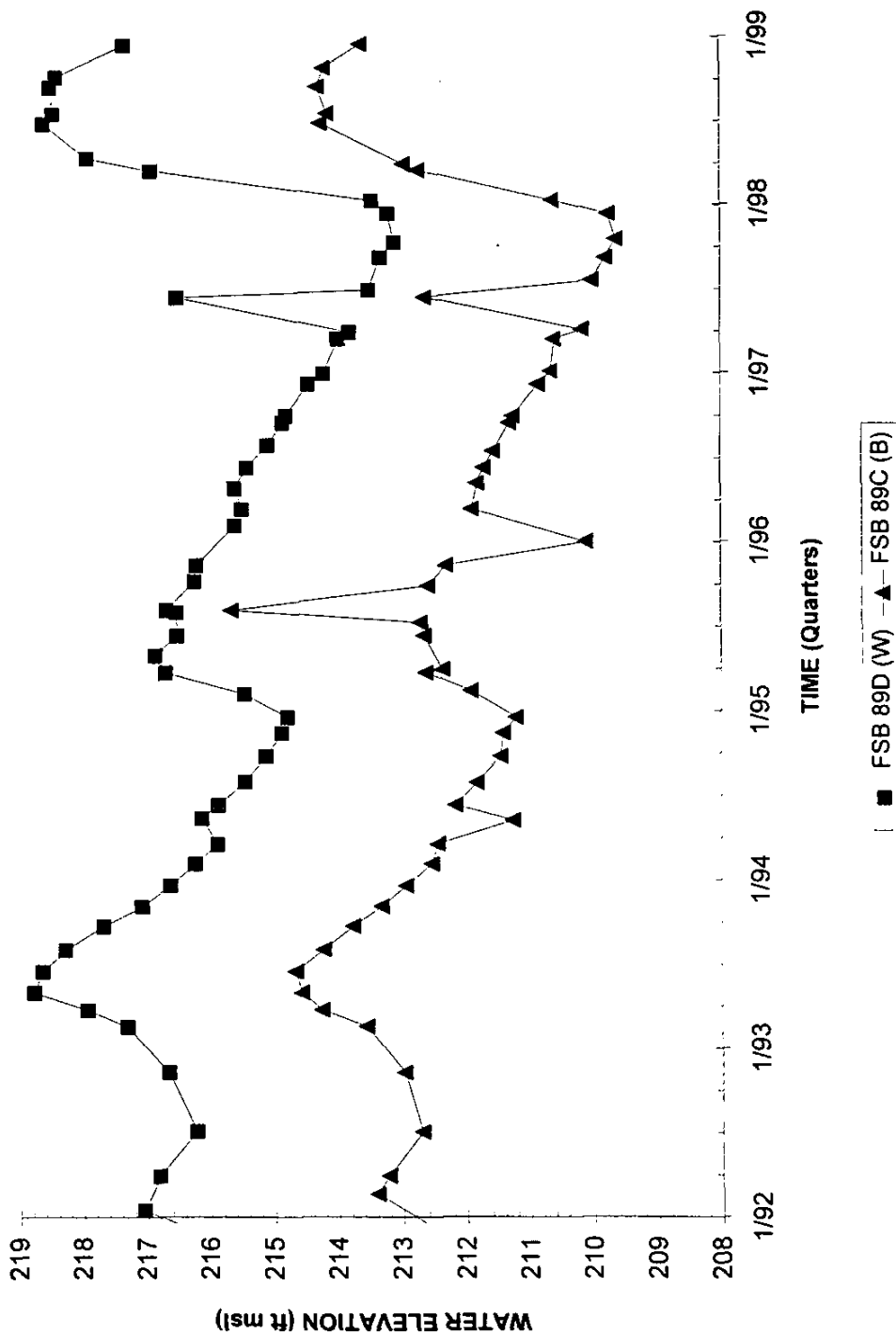
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB 88



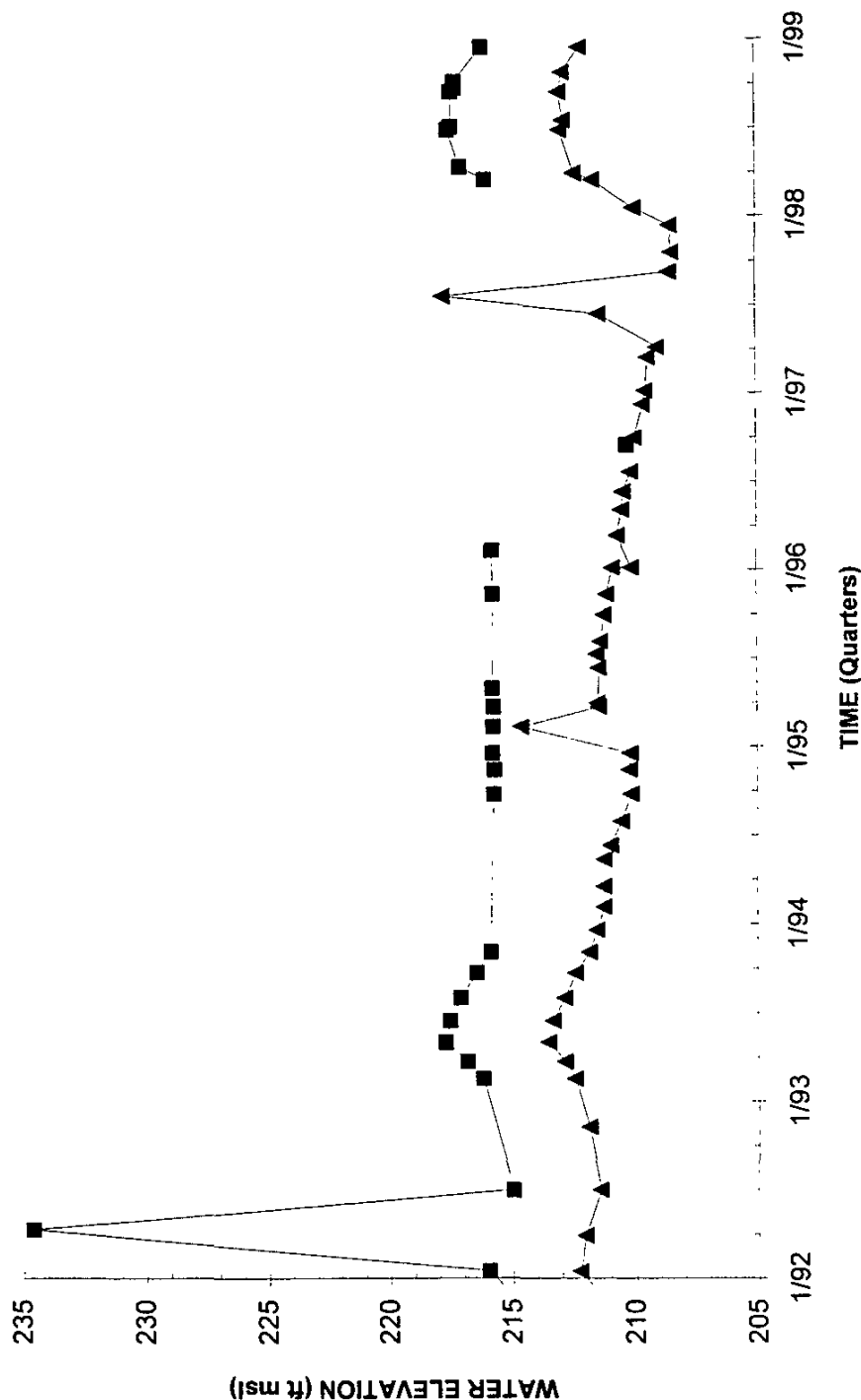
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB 89



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB 90



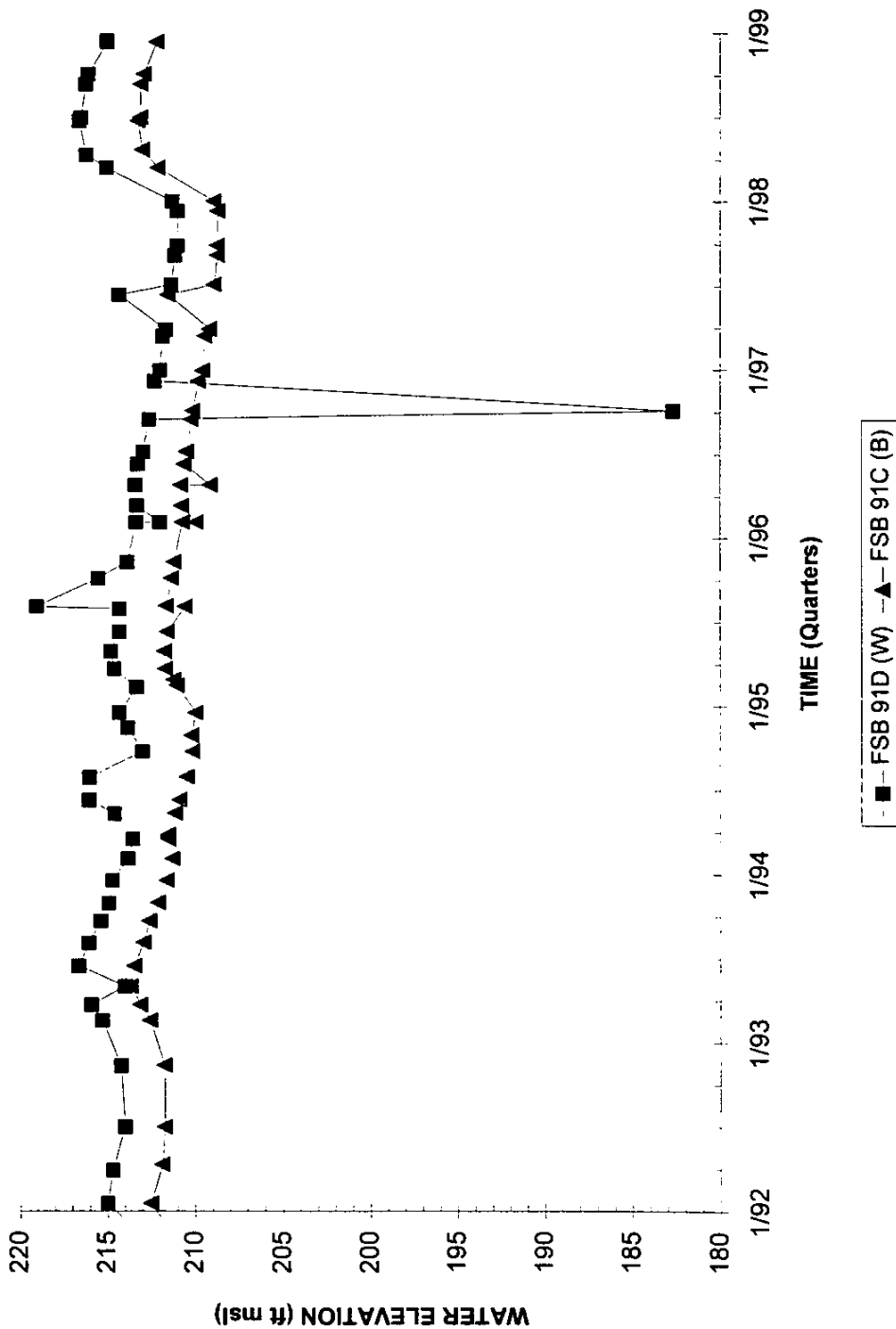
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 10

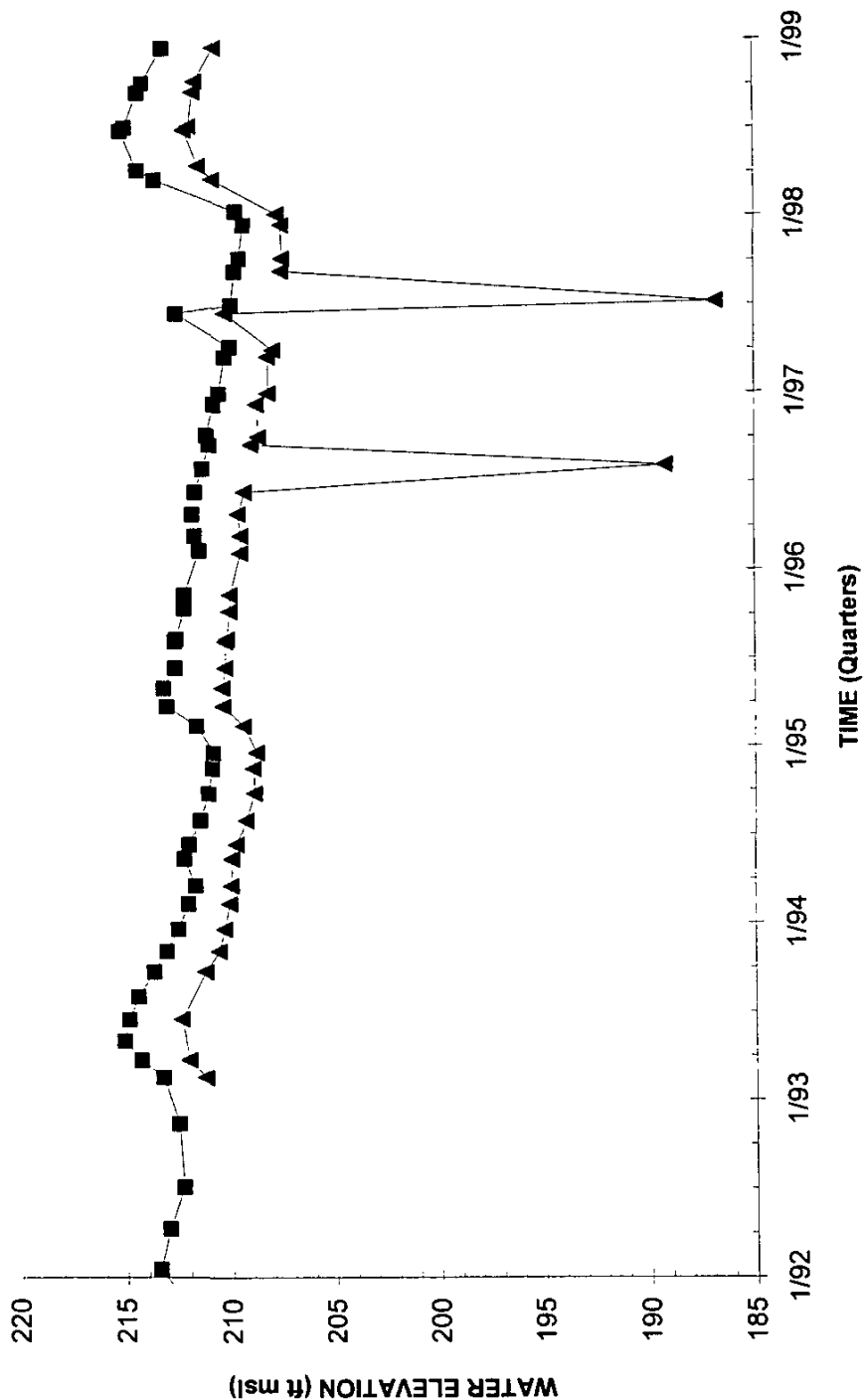
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB 91



Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB 92



■ FSB 92D (W) ▲ FSB 92C (B)

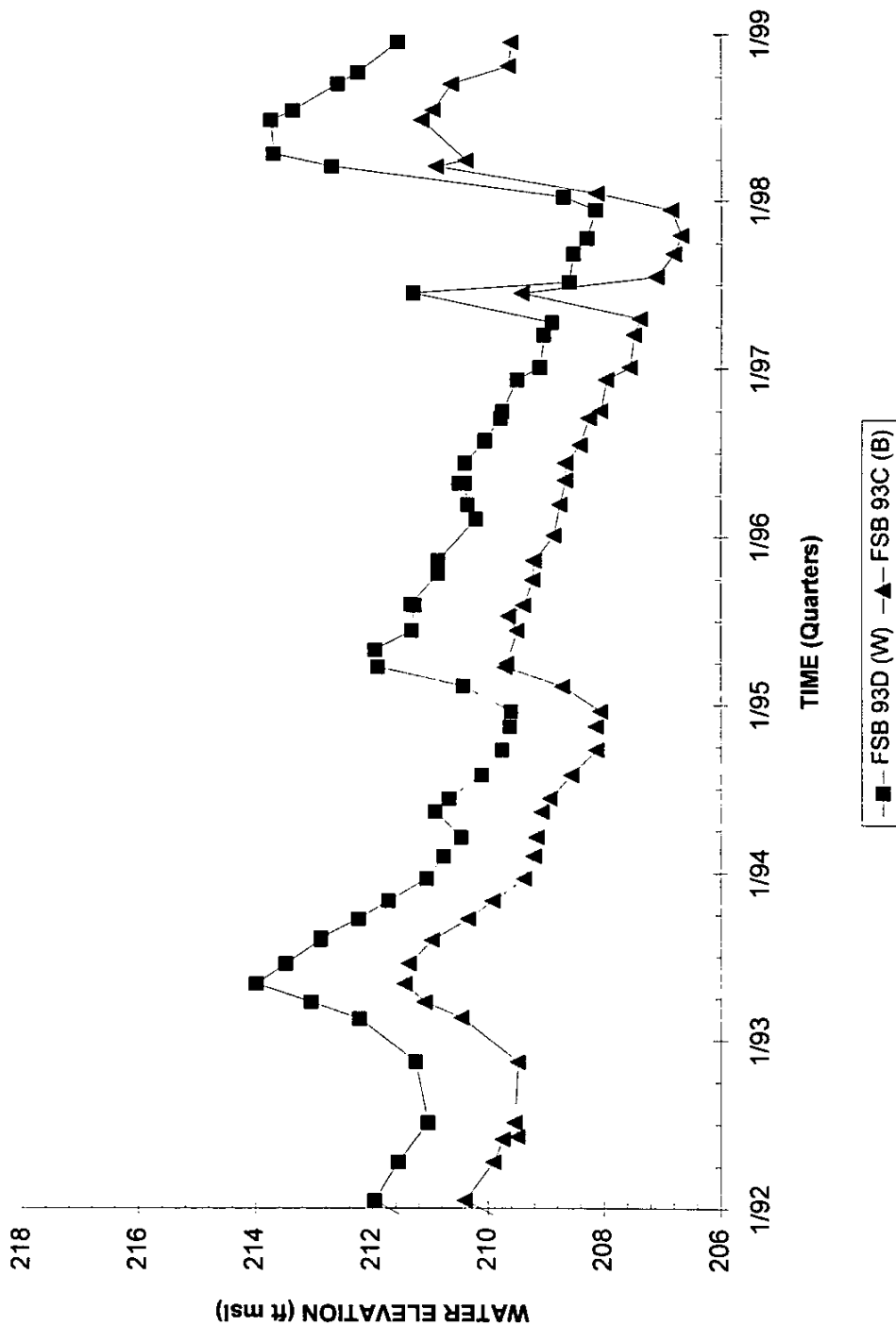
Note: W=Water Table (IIB2); B=Bamwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 12

Third and Fourth Quarter 1998

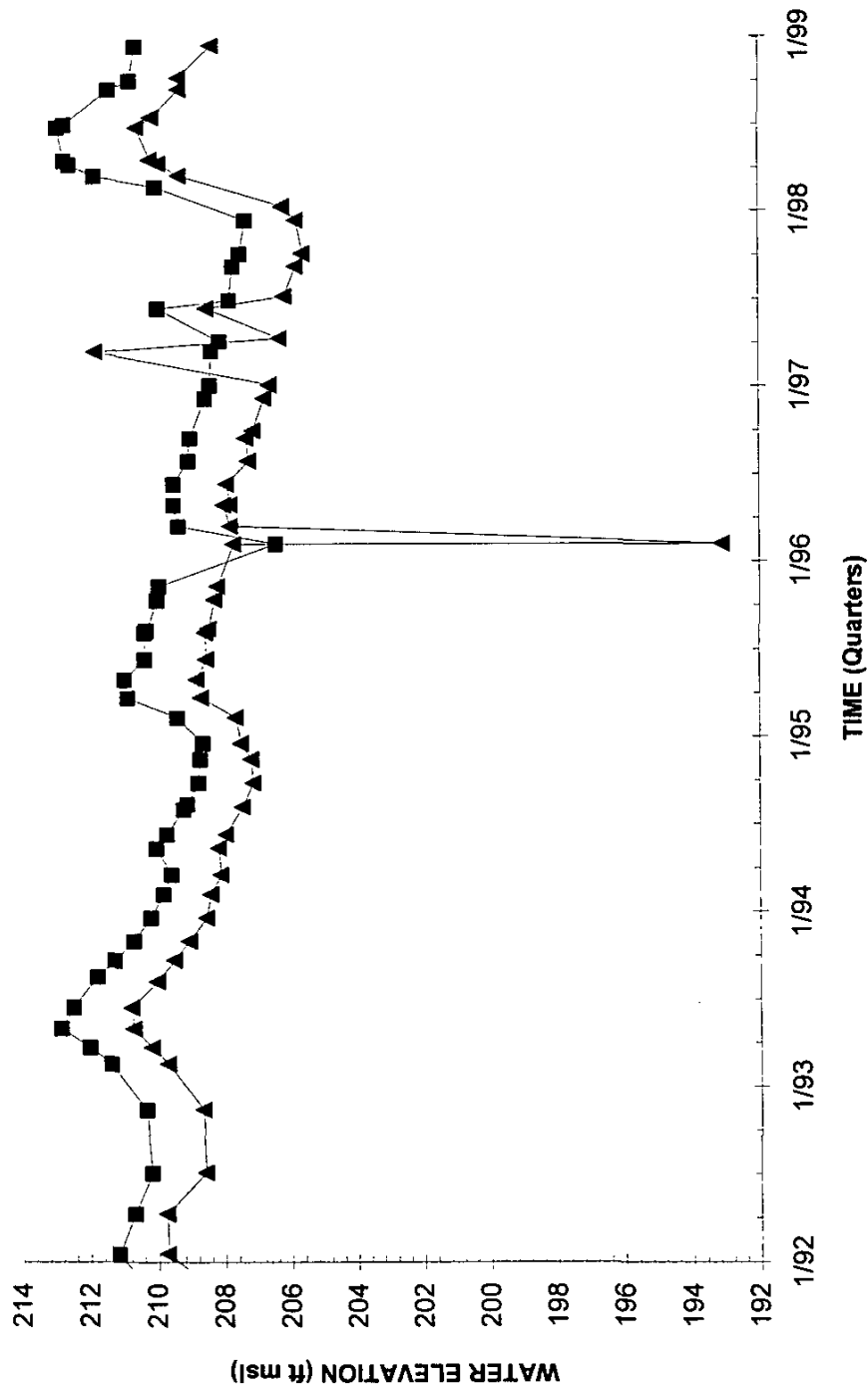
# Hydrograph Well Cluster FSB 93



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Hydrograph Well Cluster FSB 94



FSB 94DR (W)
  FSB 94C (B)

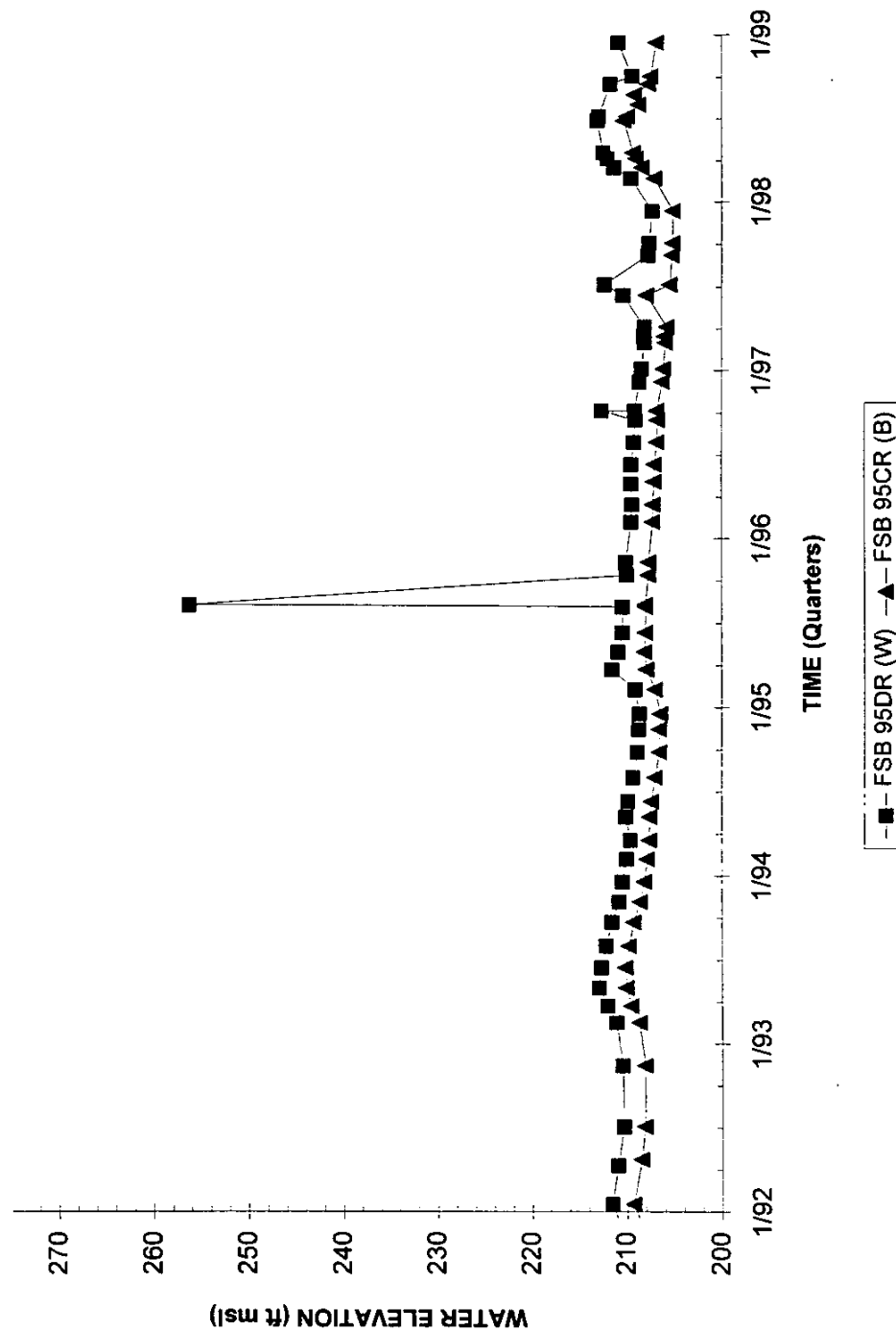
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 14

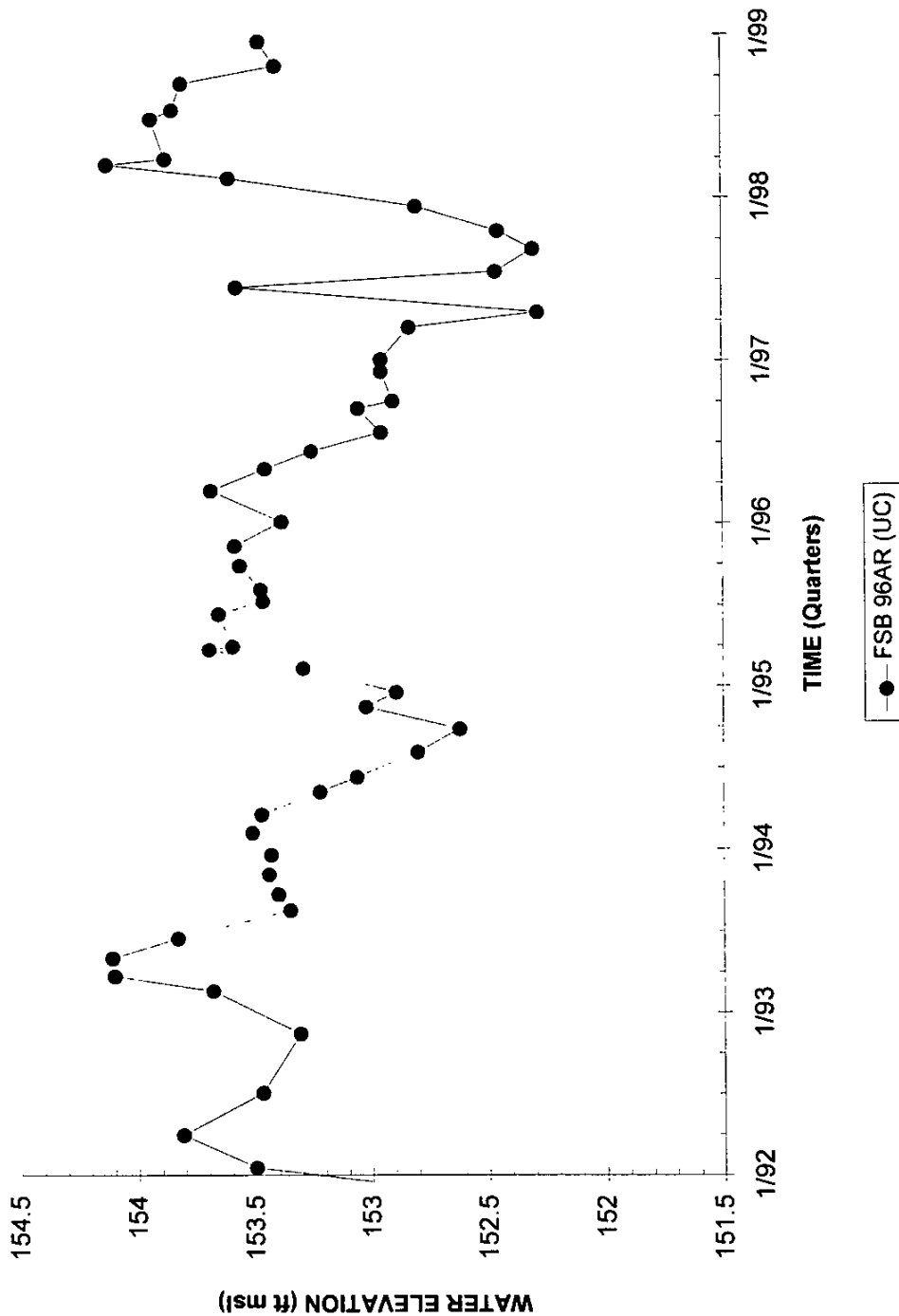
Third and Fourth Quarter 1998

## Hydrograph Well Cluster FSB 95



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSB 96AR



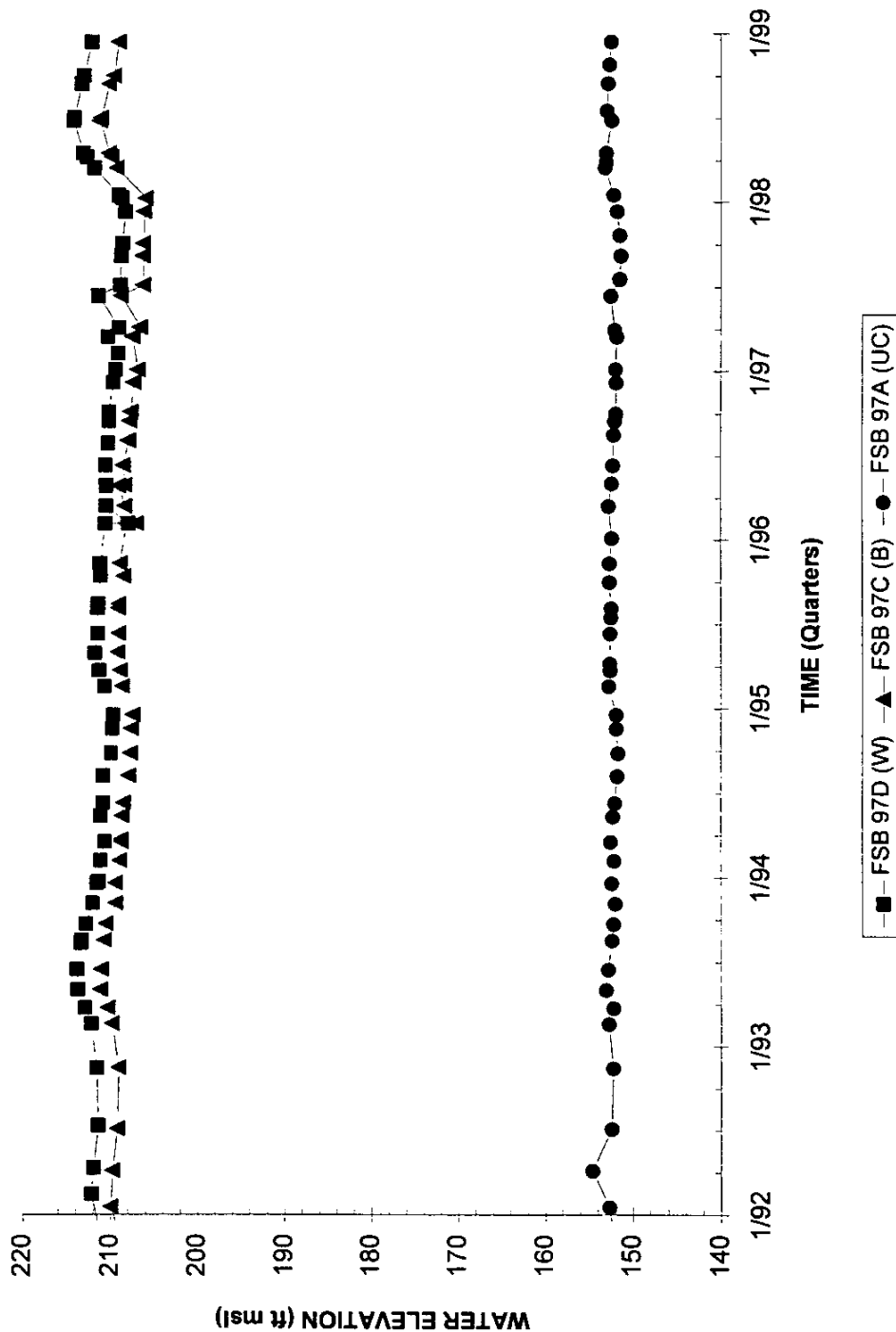
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 16

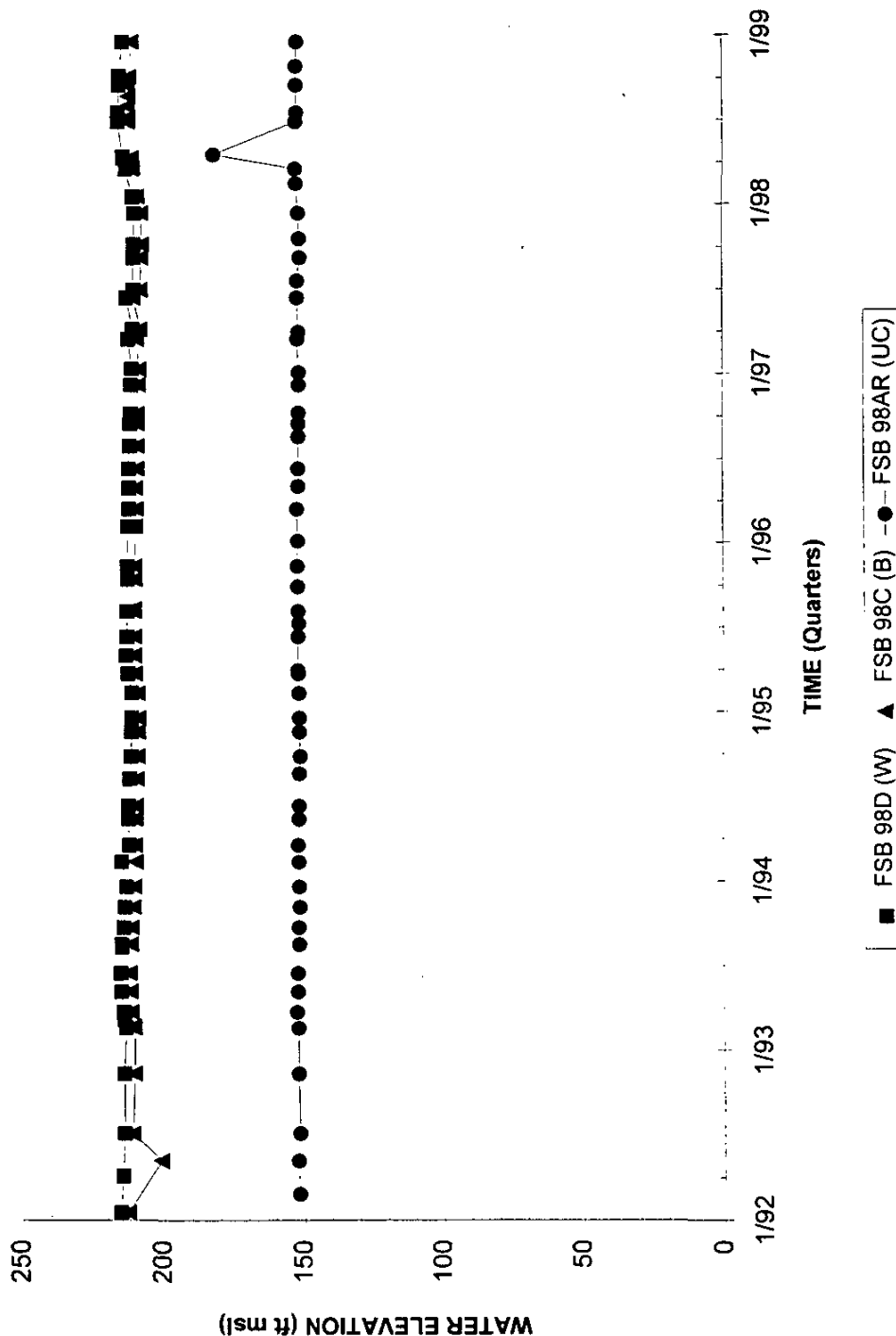
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB 97



Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB 98



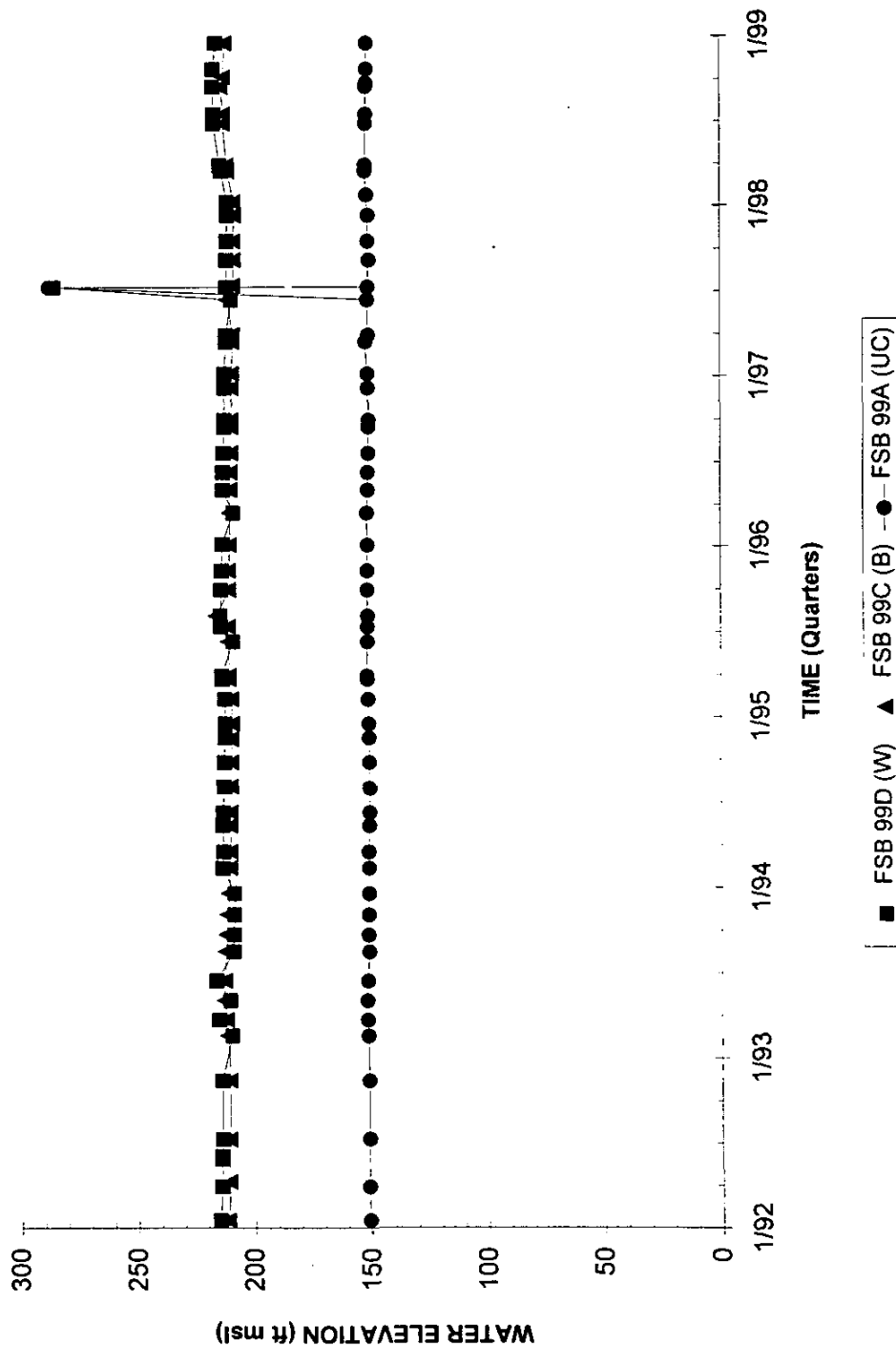
Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 18

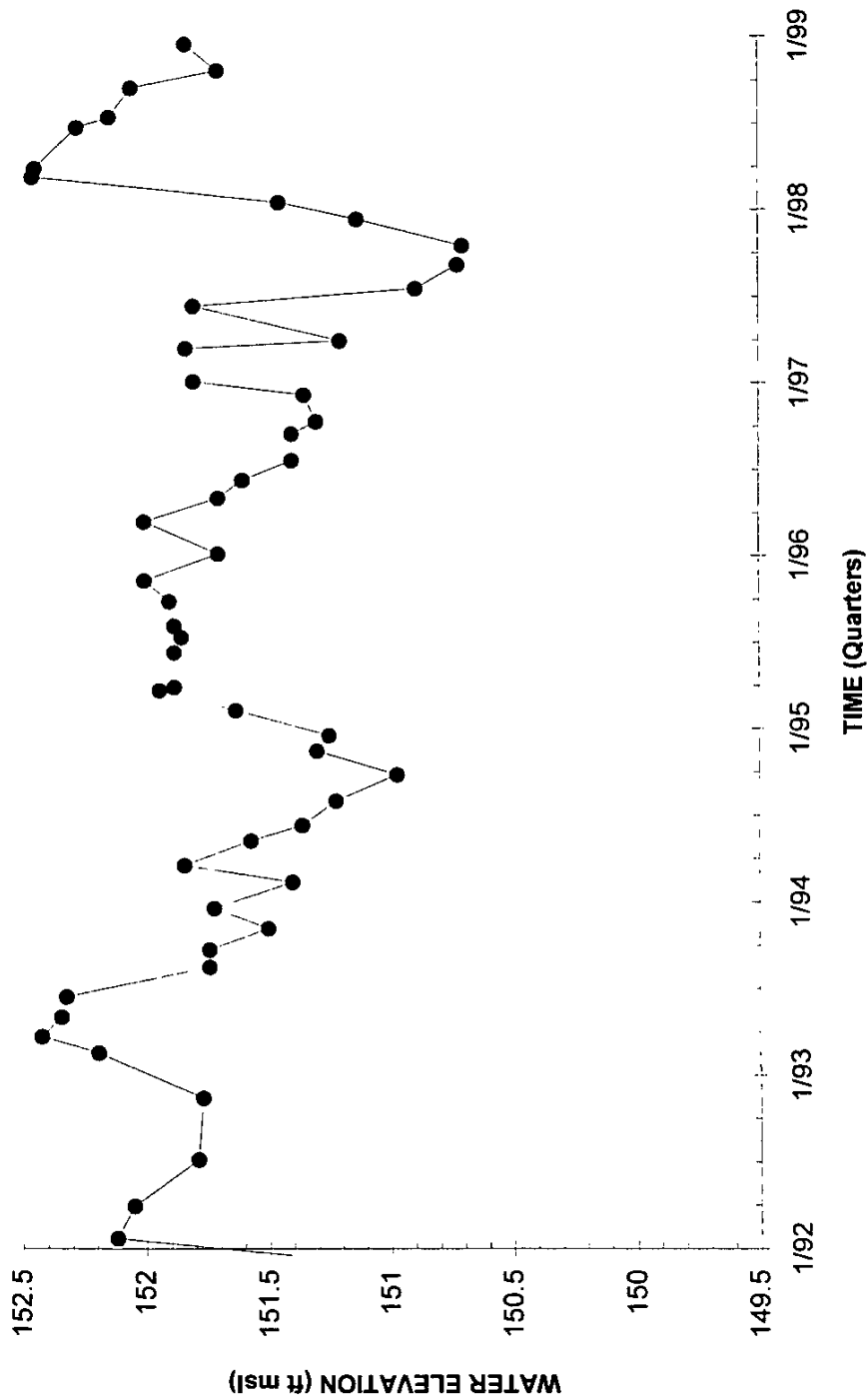
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB 99



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSB100A



FSB100A (UC)

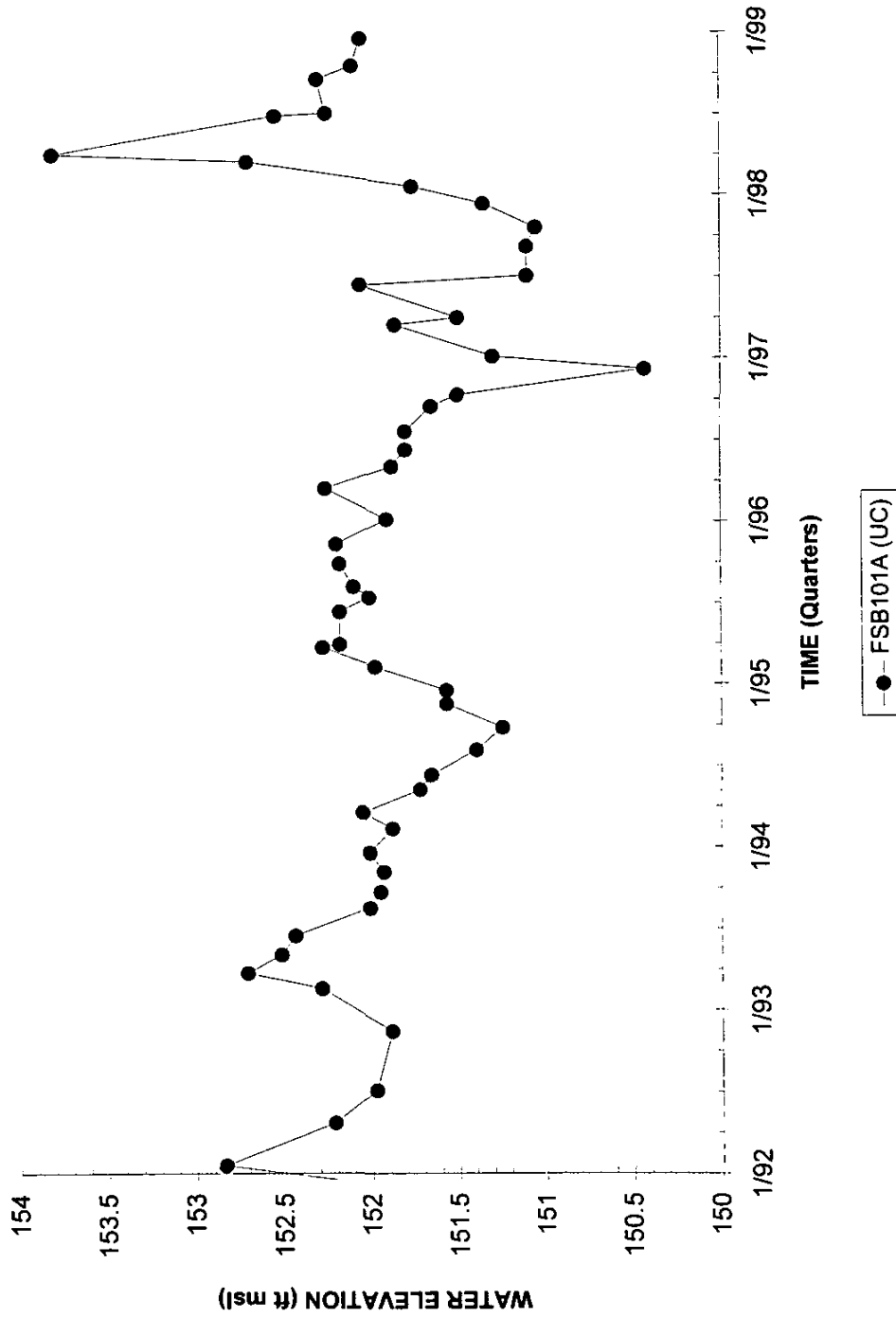
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 20

Third and Fourth Quarter 1998

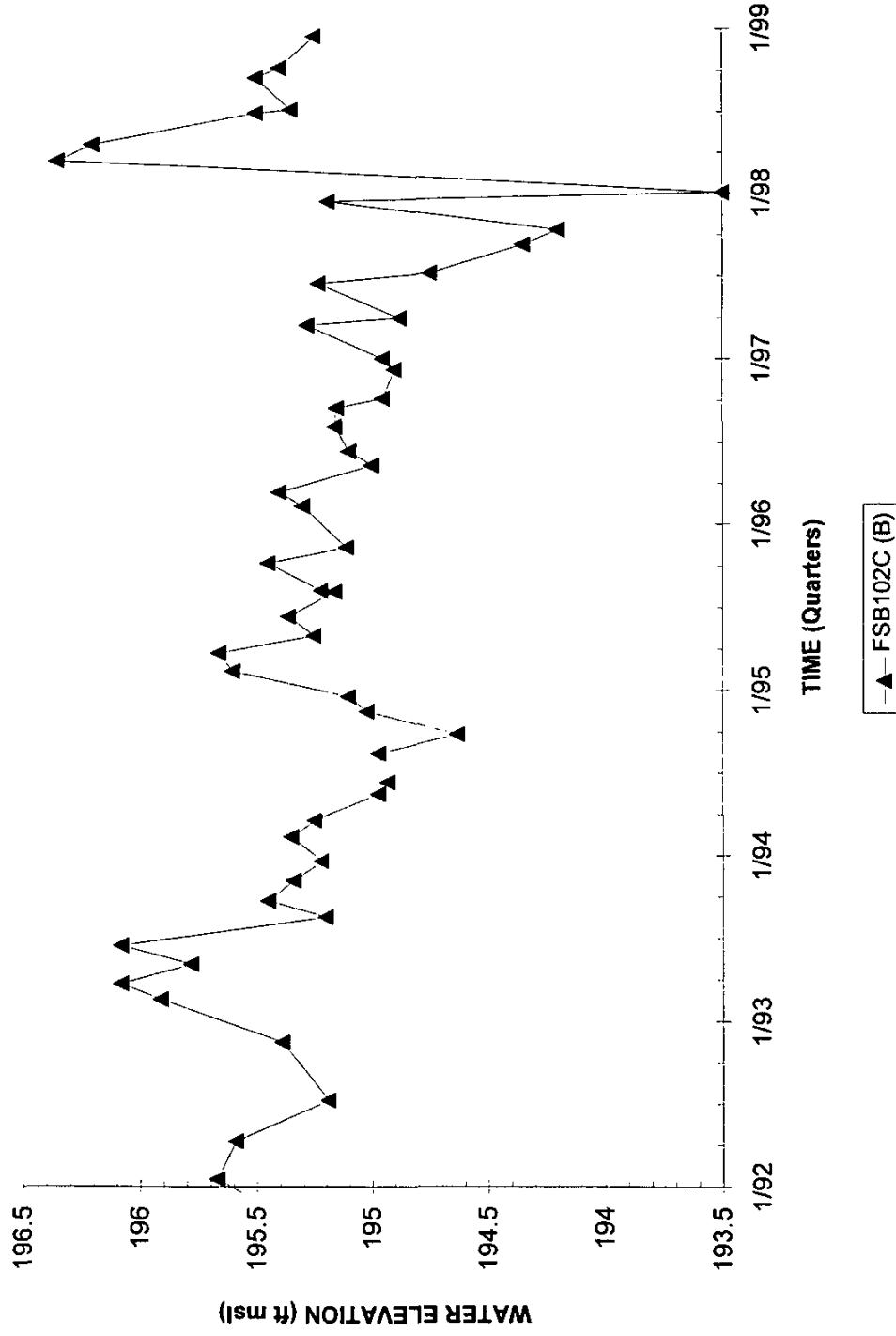
# Hydrograph Well FSB101A



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Hydrograph Well FSB102C



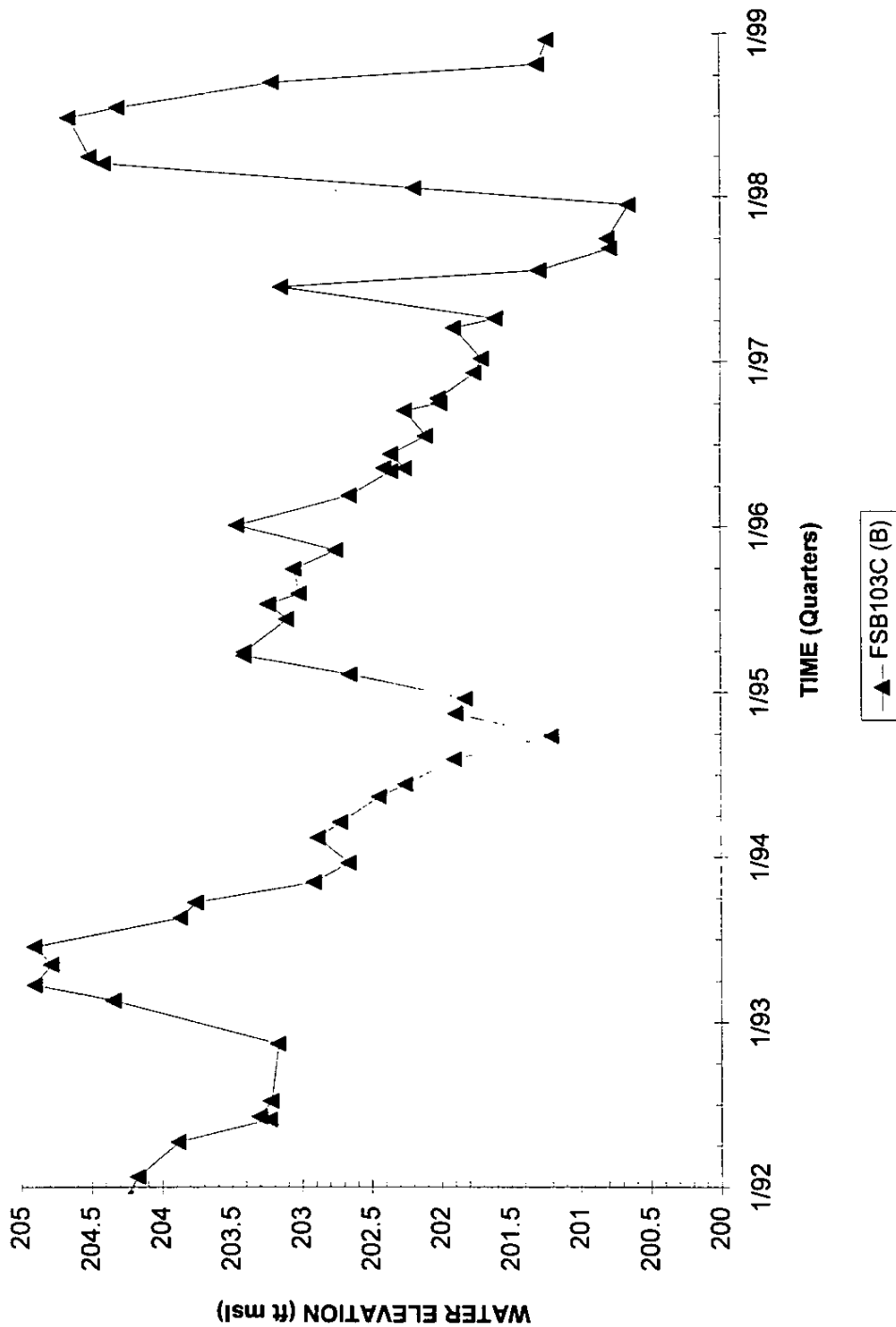
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 22

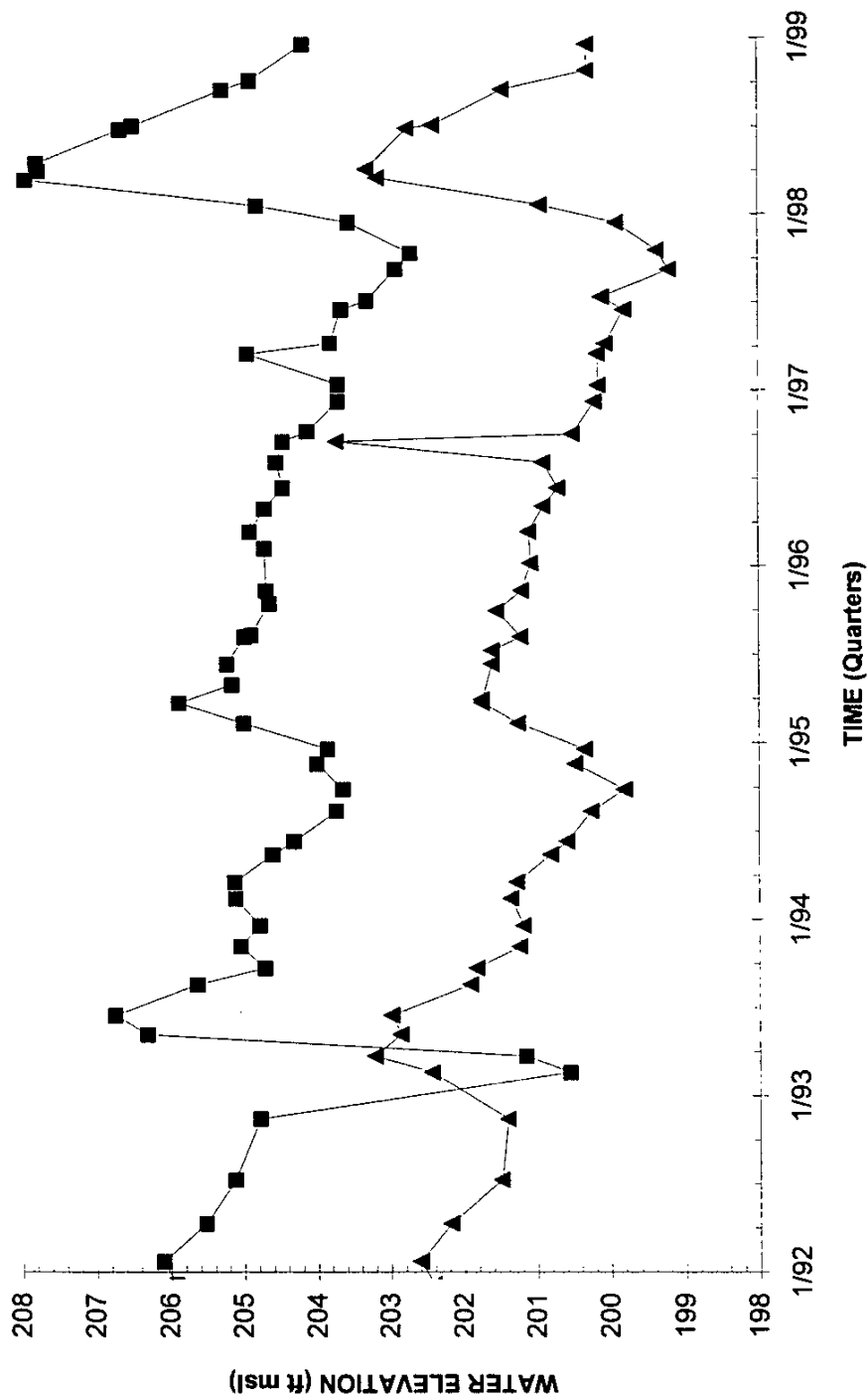
Third and Fourth Quarter 1998

## Hydrograph Well FSB103C



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB104



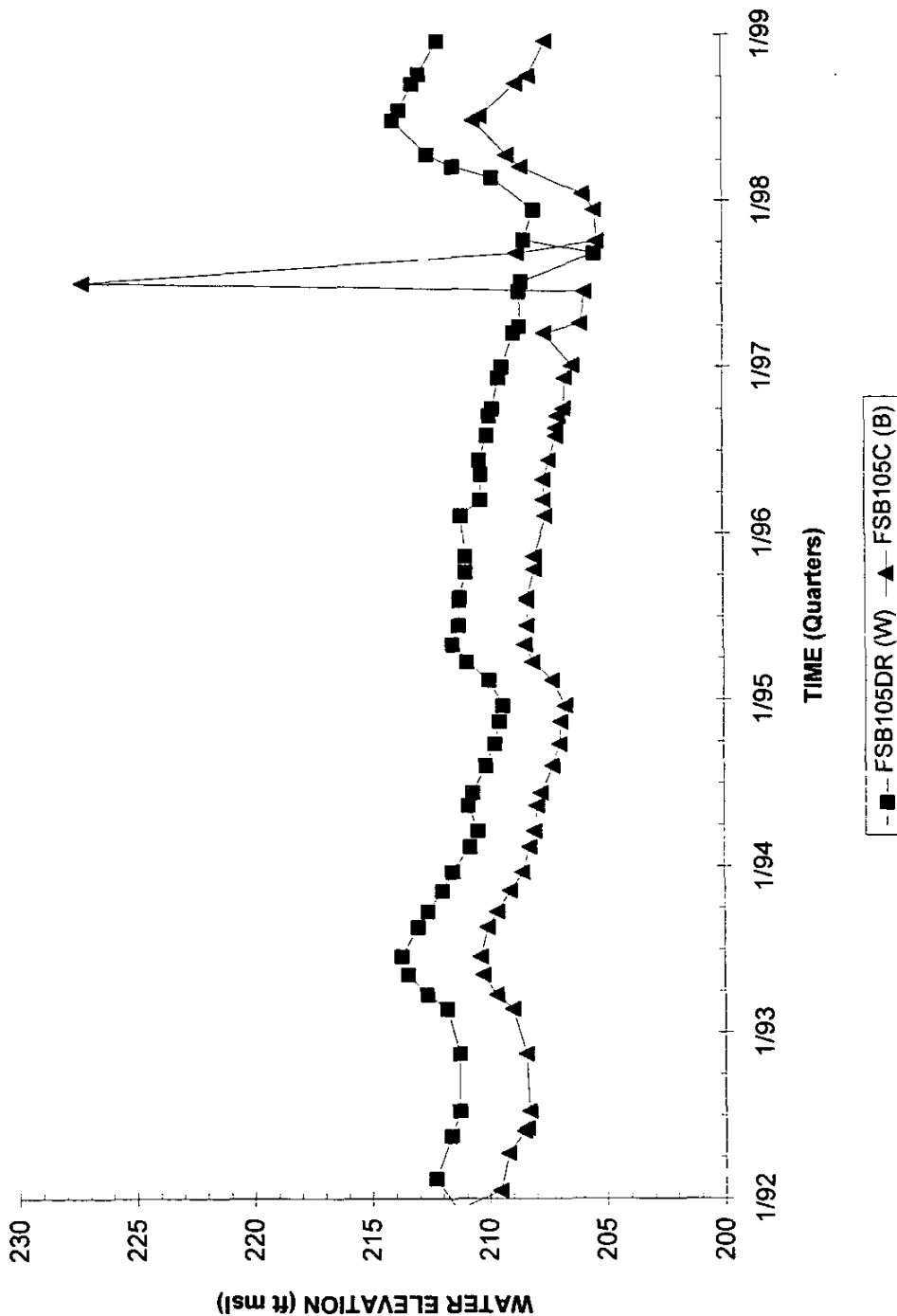
Note: W=Water Table (IB2); B=Barnwell (IB1); N=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 24

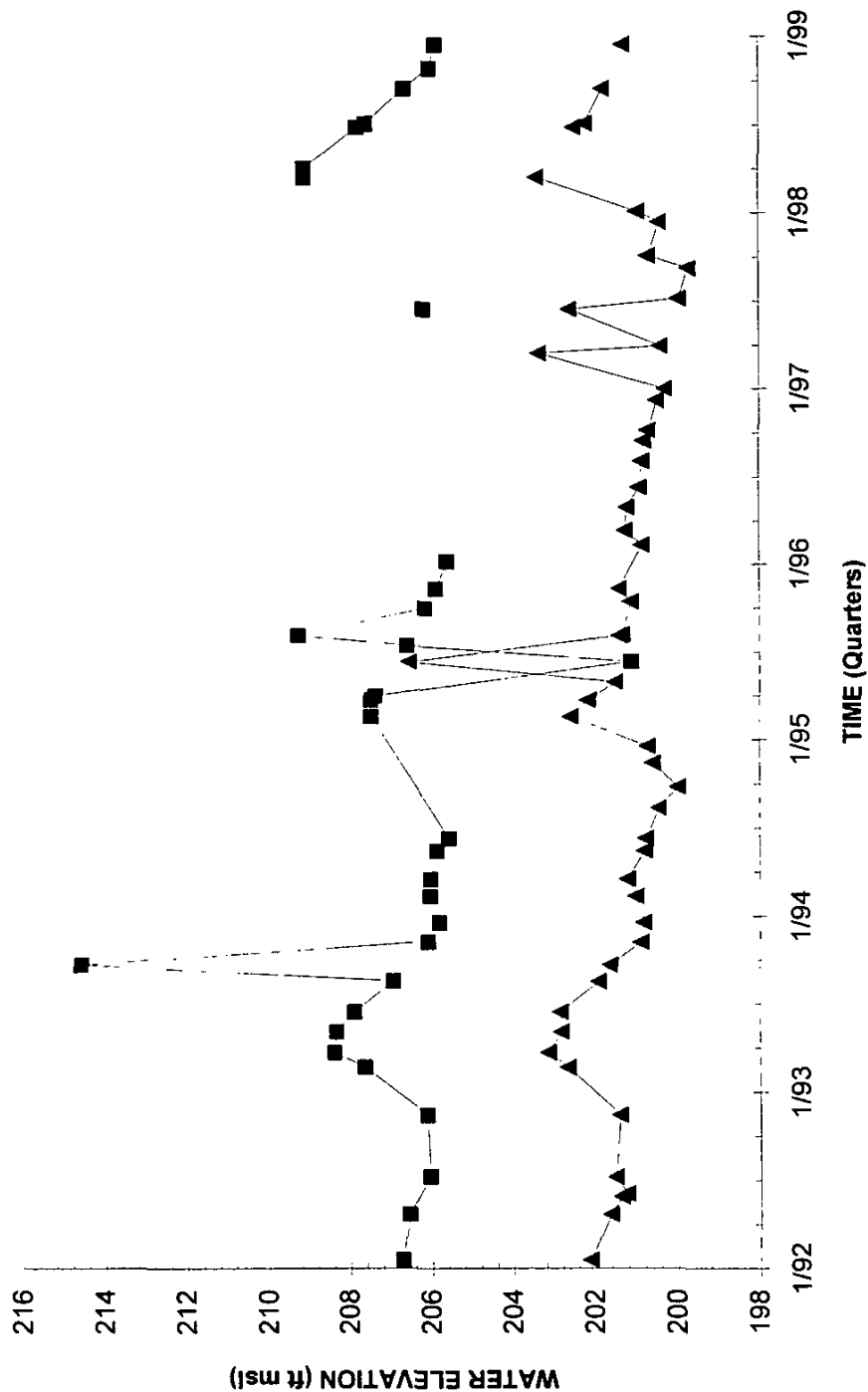
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB105



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB106



—■— FSB106D (W) —▲— FSB106C (B)

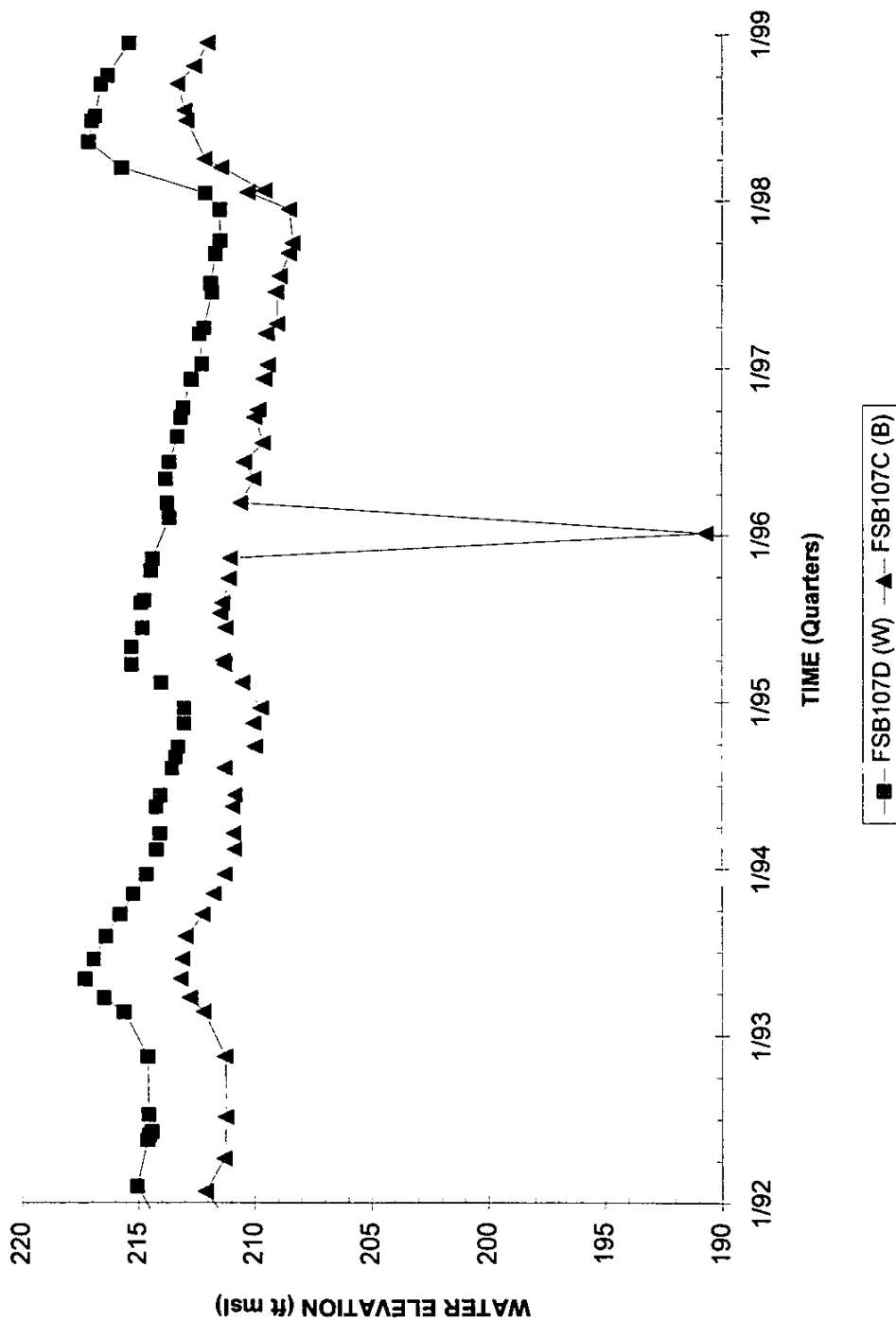
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 26

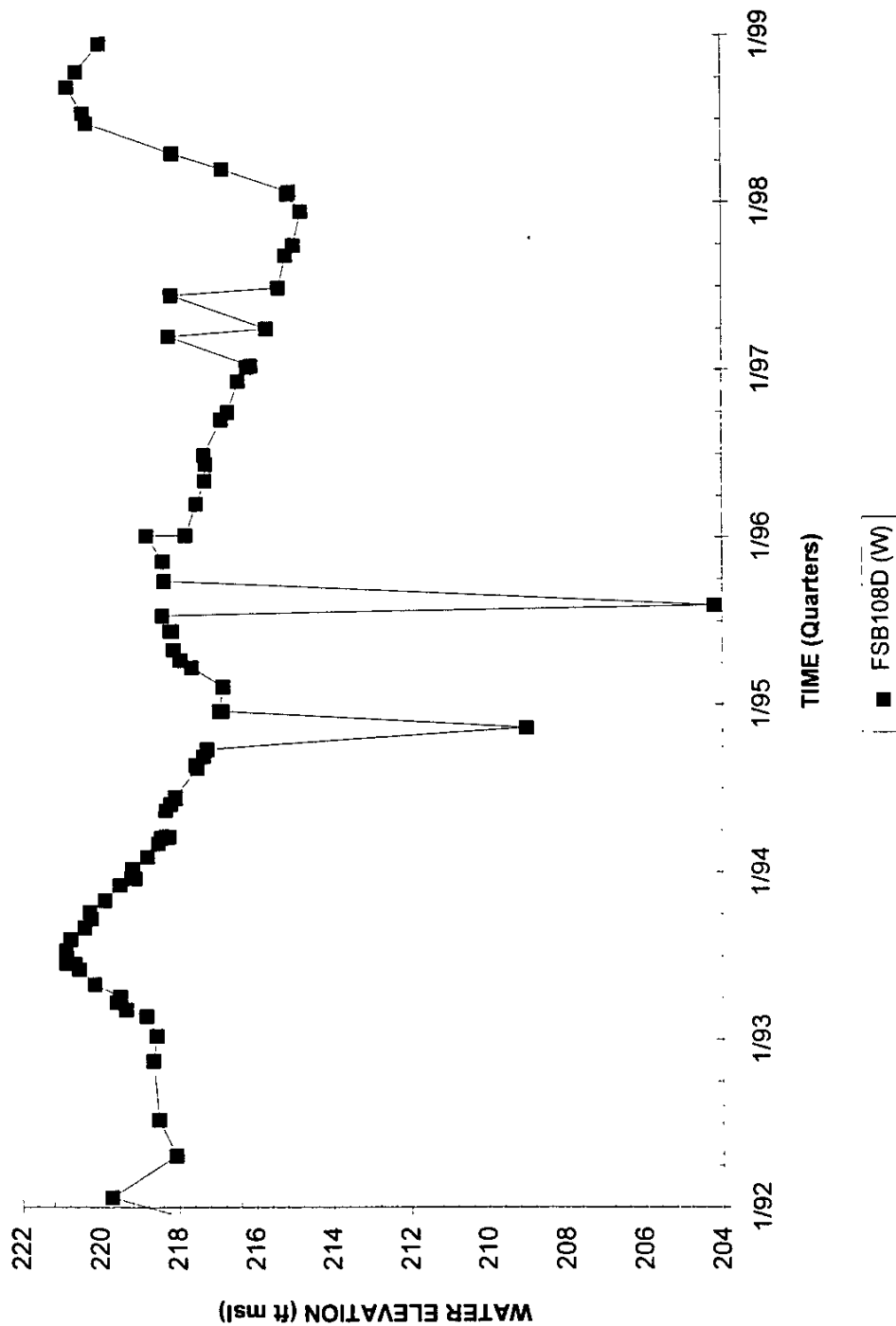
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB107



Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSB108D



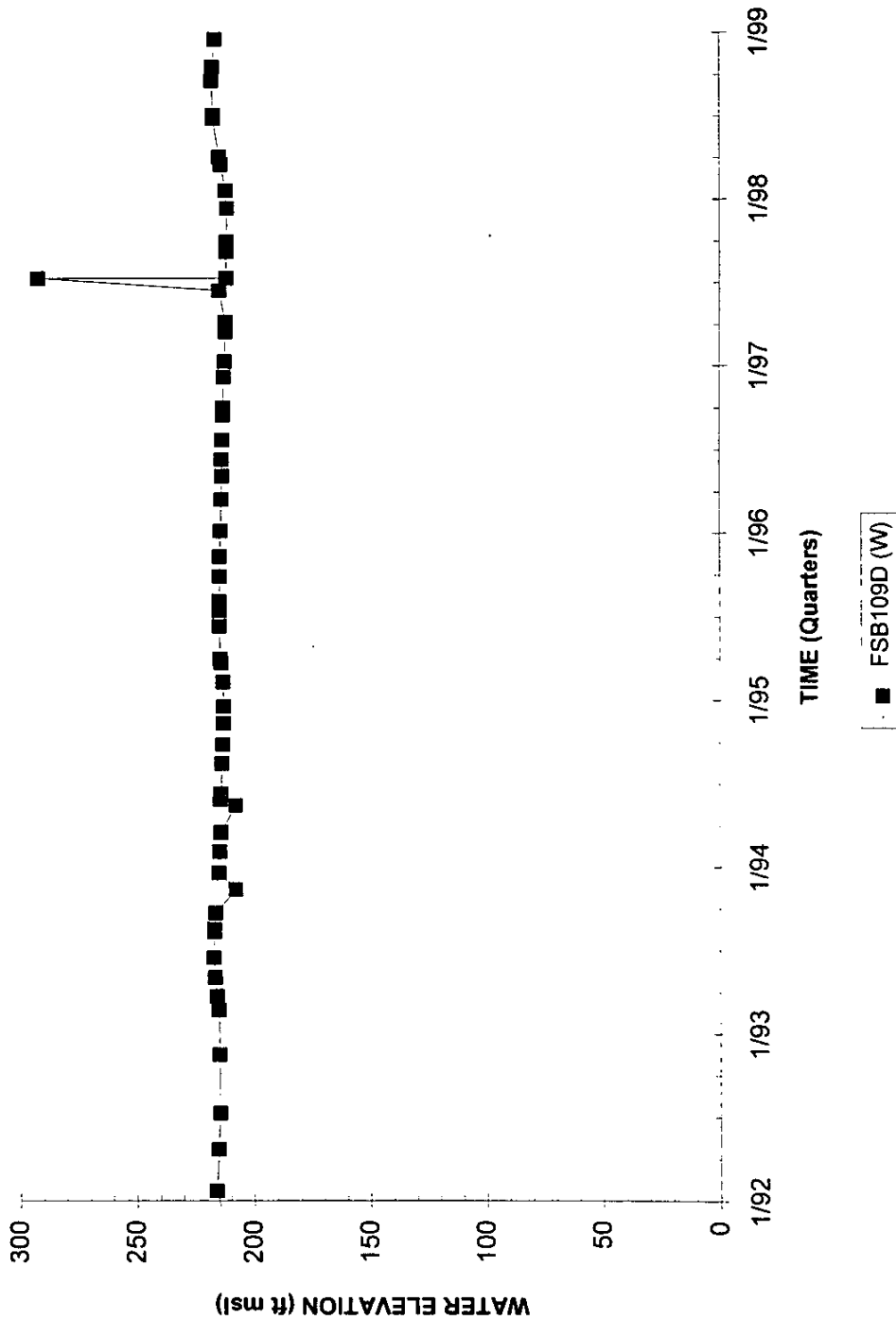
Note: W=Water Table (IB2); S=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 28

Third and Fourth Quarter 1998

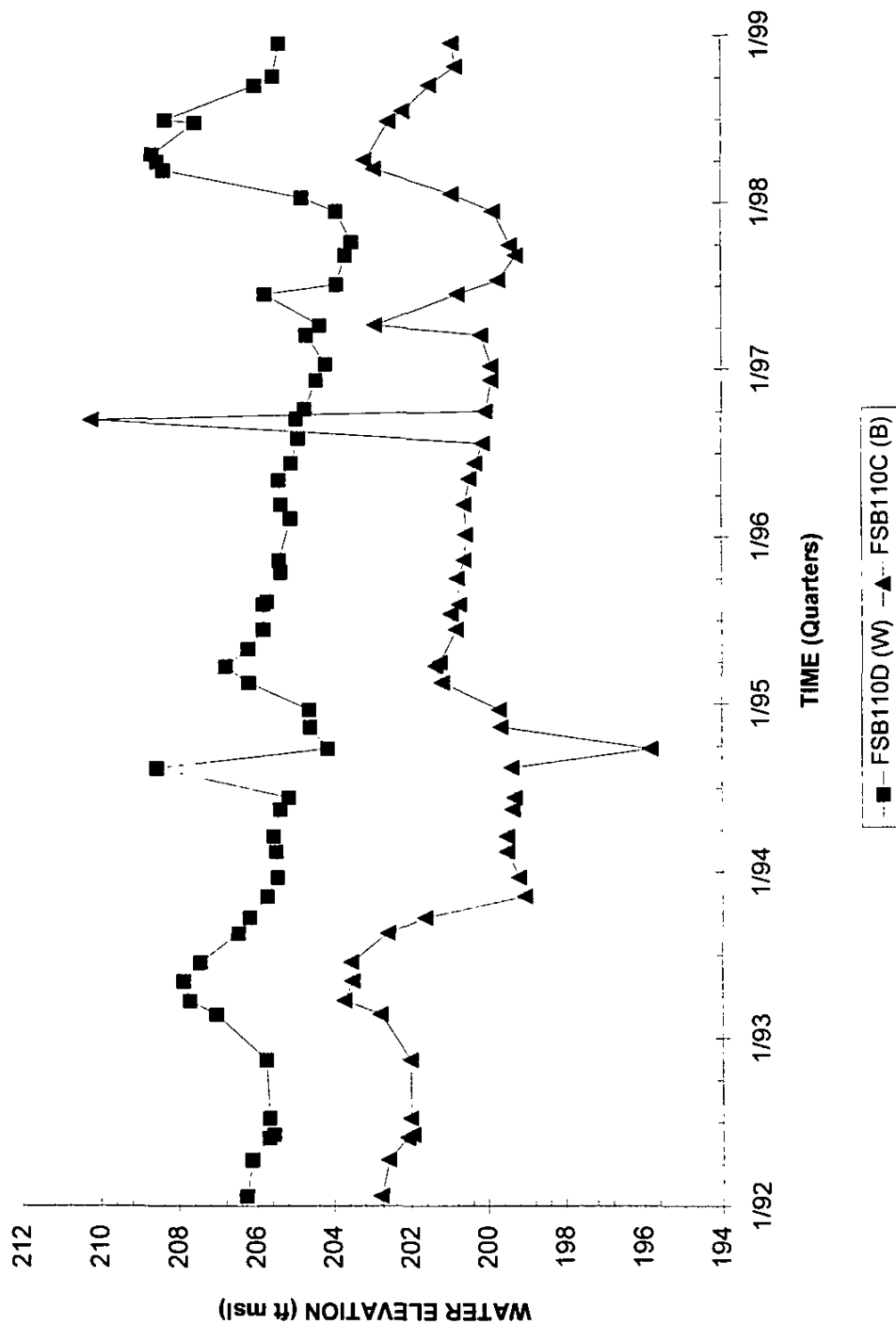
# Hydrograph Well FSB109D



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



# Hydrograph Well Cluster FSB110



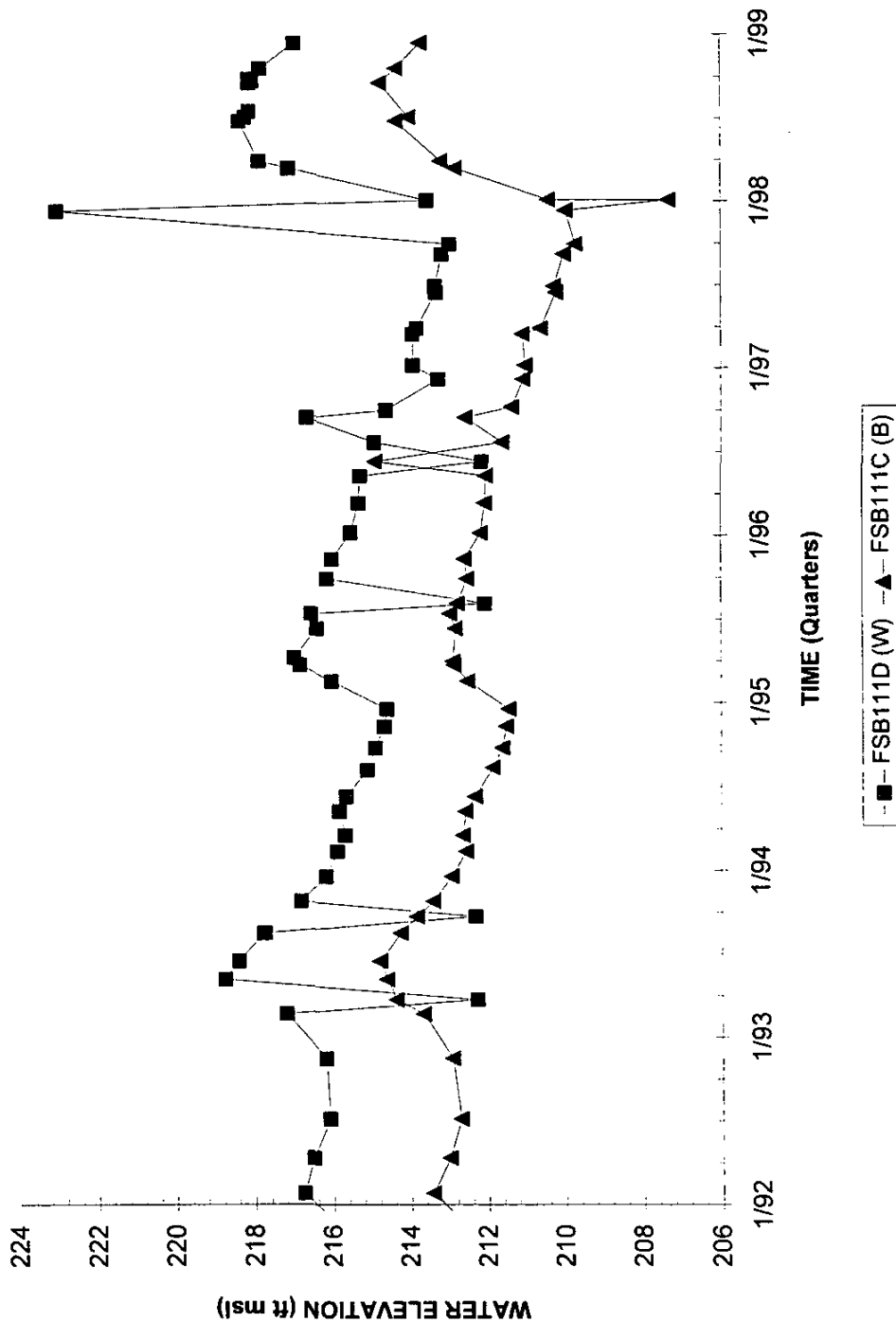
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 30

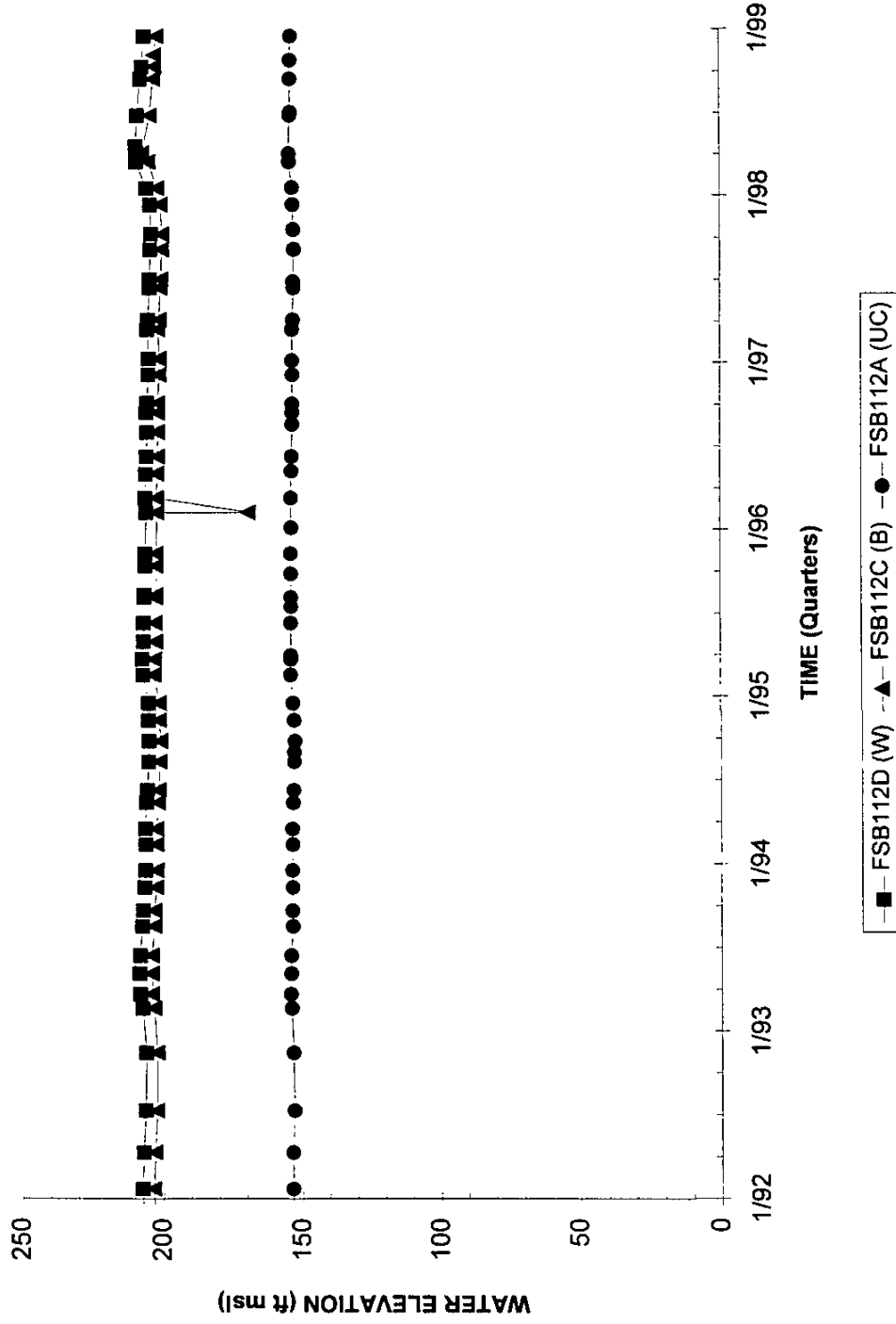
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB111



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB112



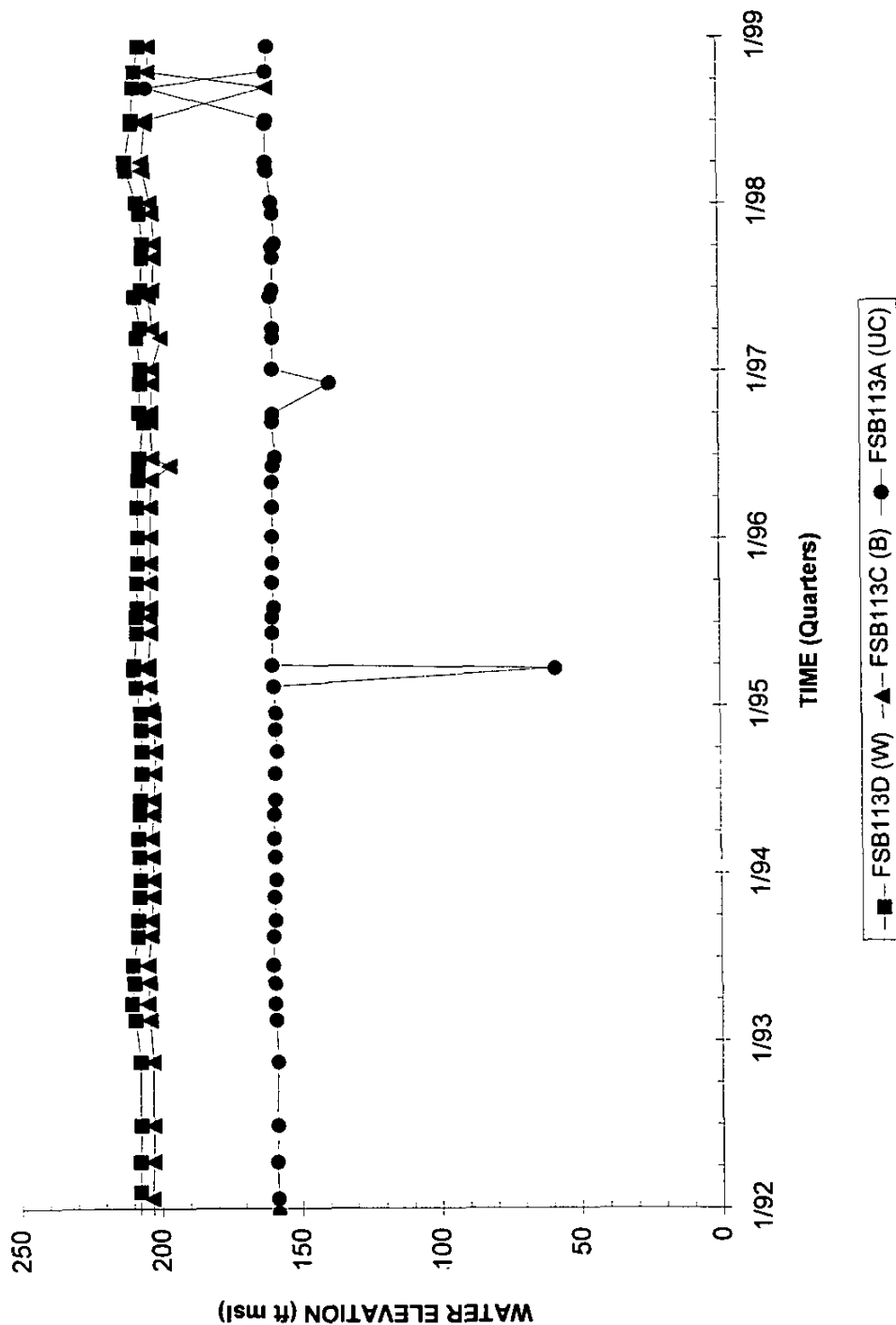
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 32

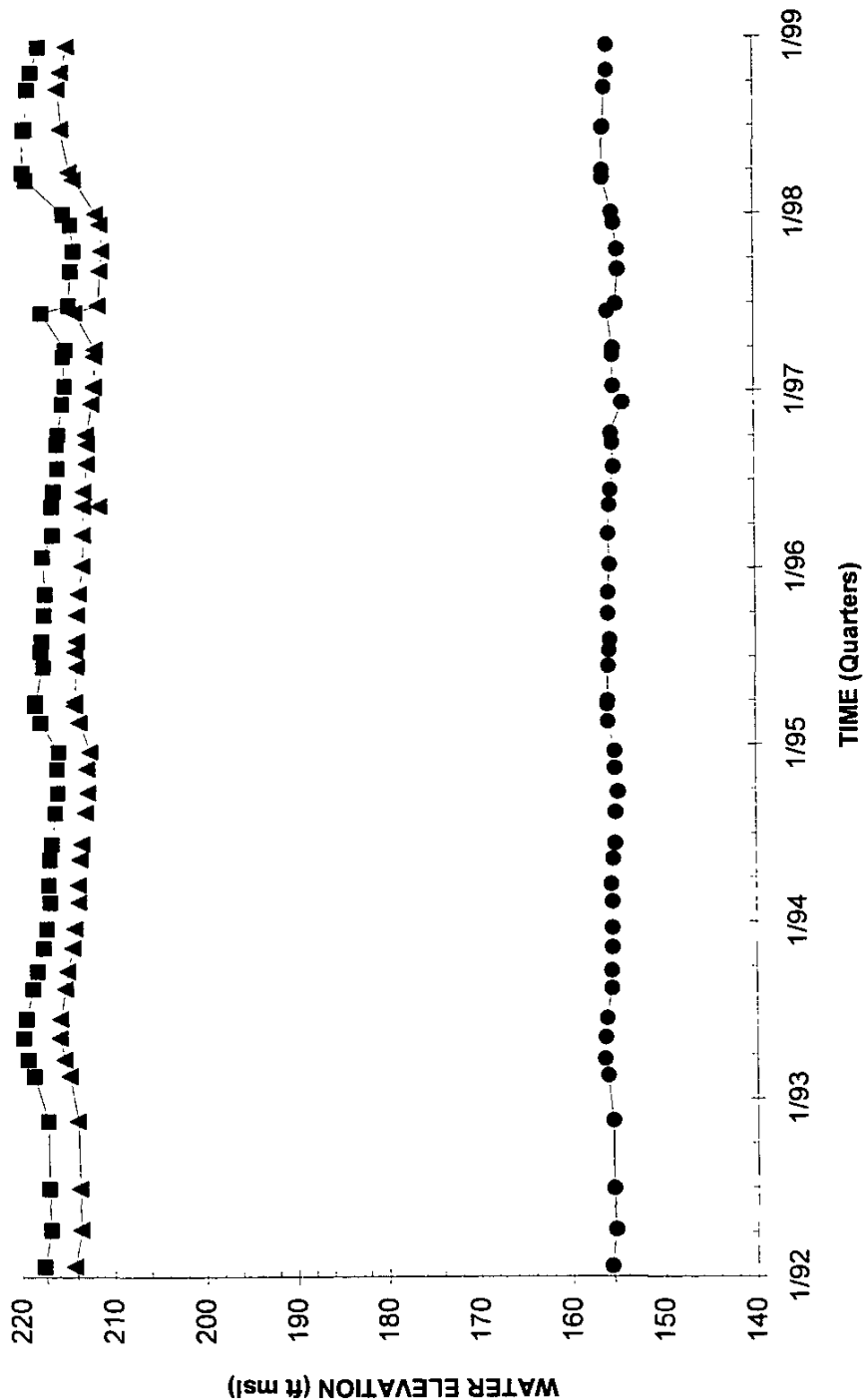
Third and Fourth Quarter 1998

## Hydrograph Well Cluster FSB113



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB114



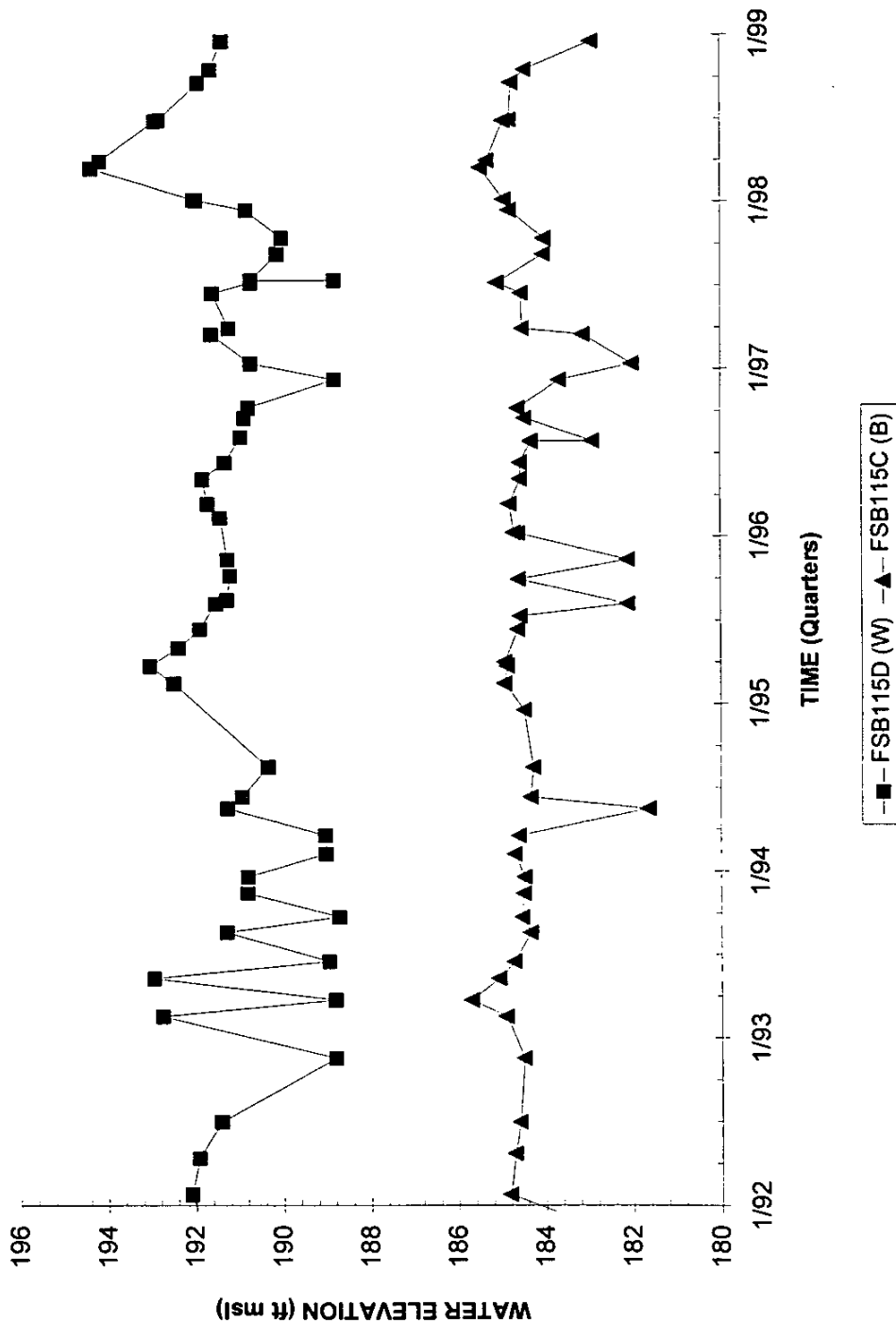
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 34

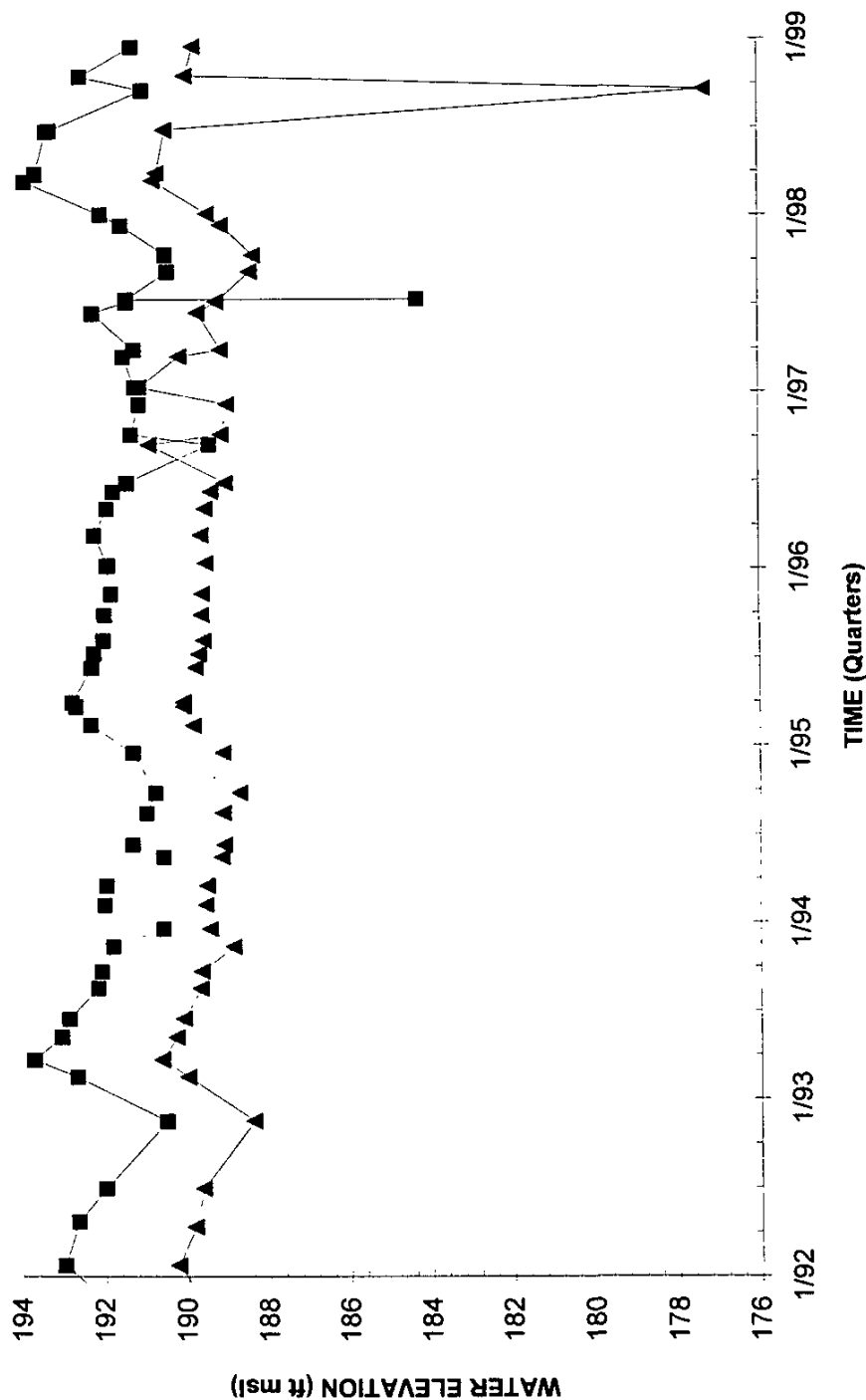
Third and Fourth Quarter 1998

## Hydrograph Well Cluster FSB115



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB116



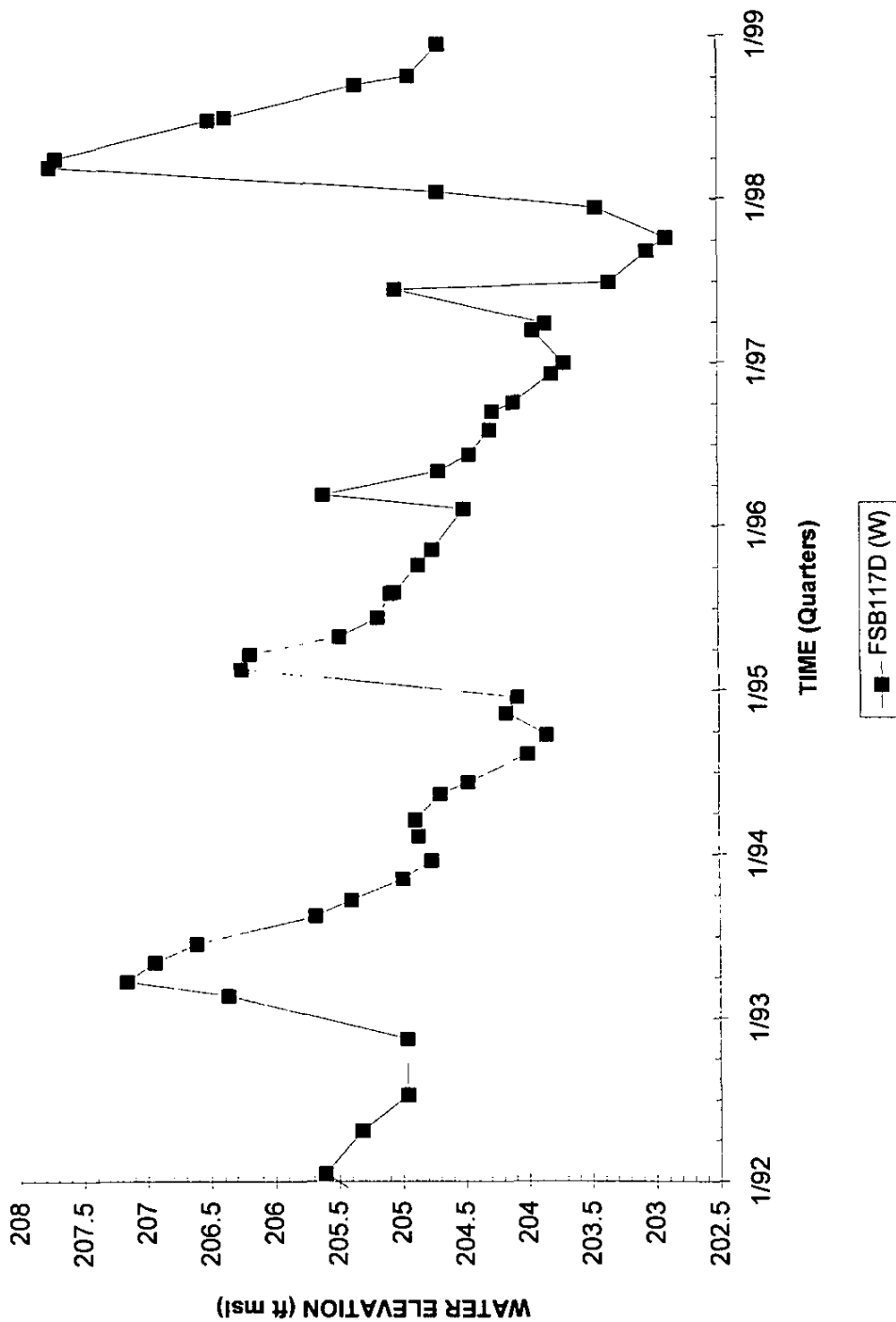
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 36

Third and Fourth Quarter 1998

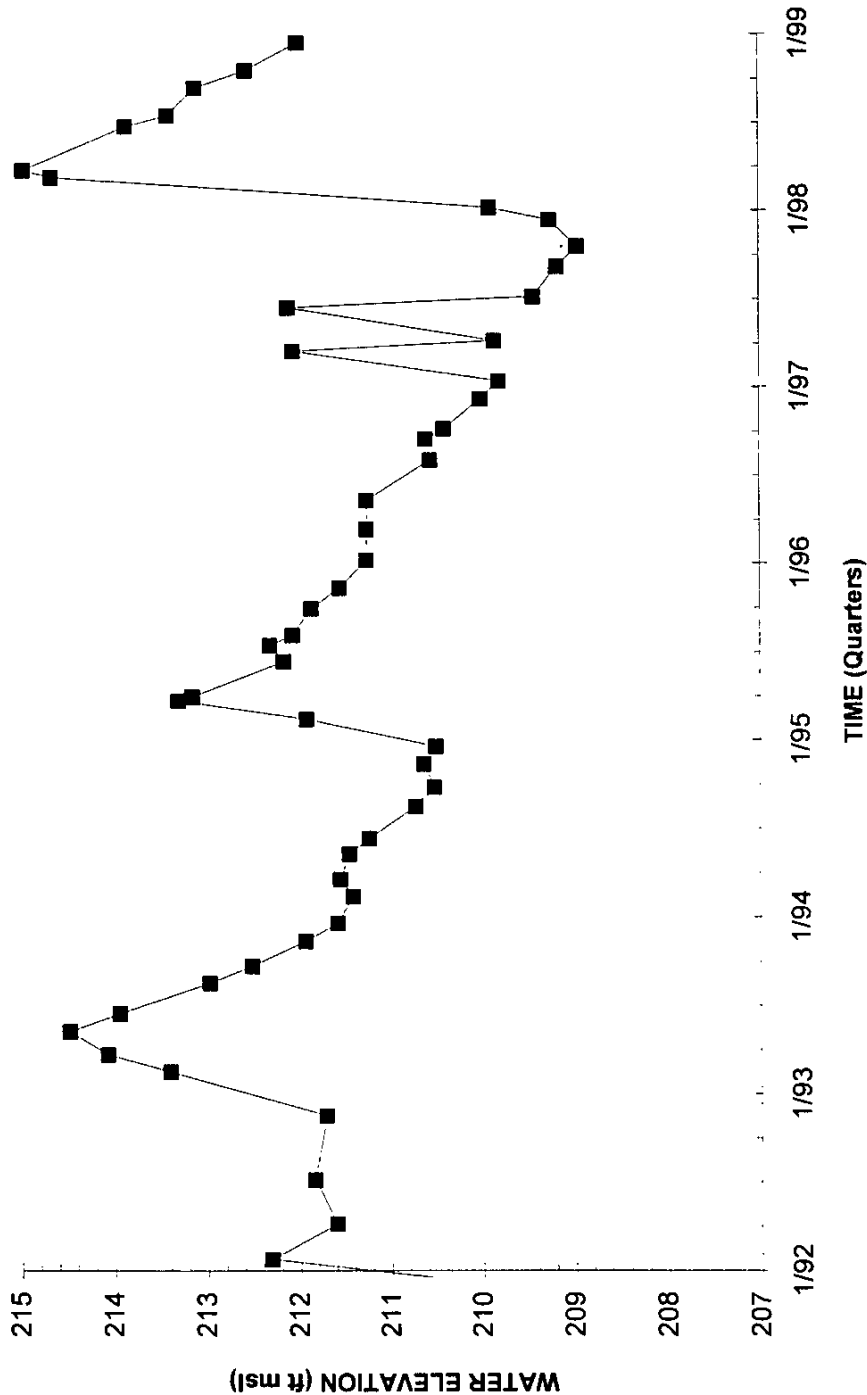
## Hydrograph Well FSB117D



Note: W=Water Table (IIB2), B=Barnwell (IIB1), M=McBean (IIB1), UC=Upper Congaree (IIA), MC=Middle Congaree (IIA), LC=Lower Congaree (IIA)

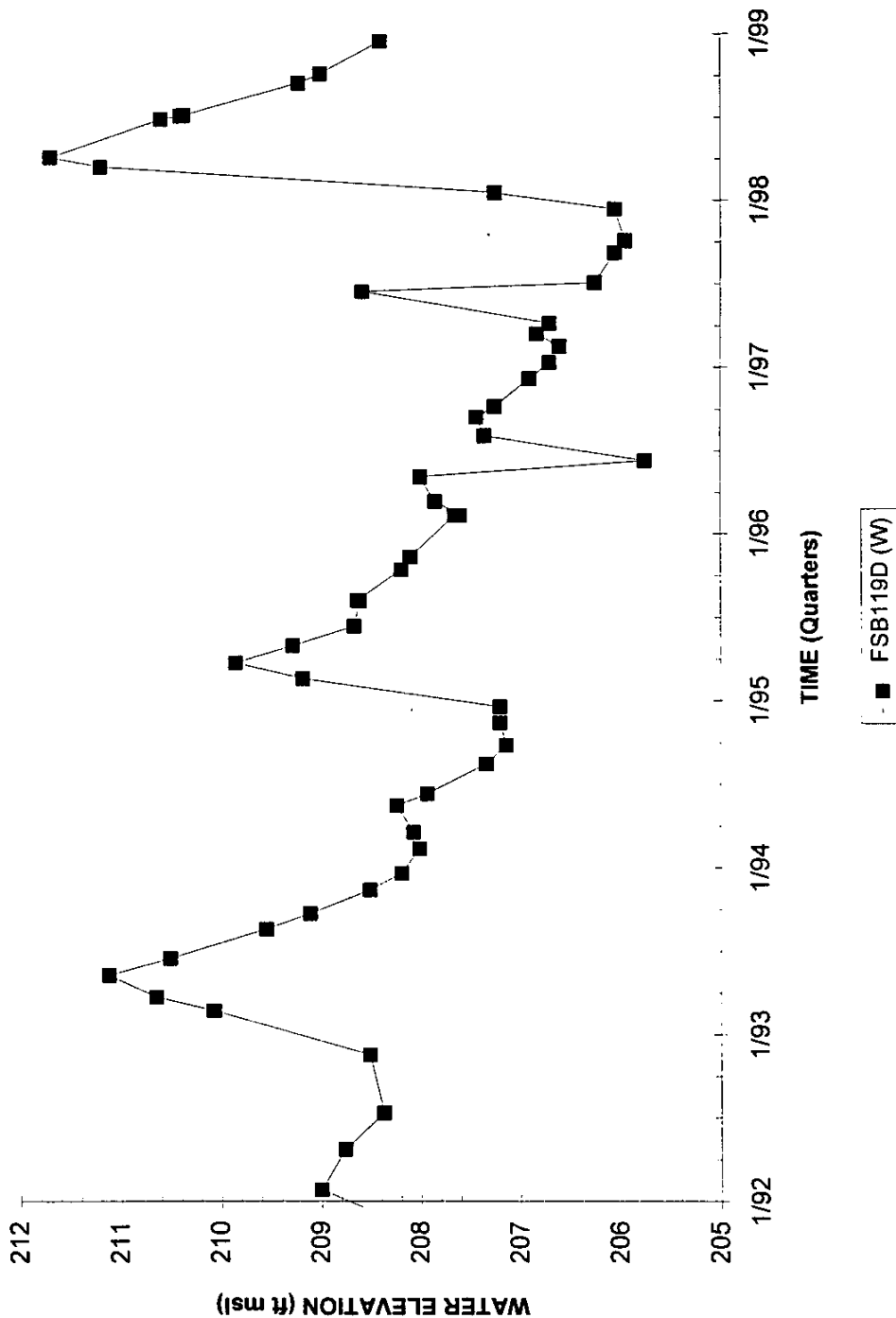


# Hydrograph Well FSB118D



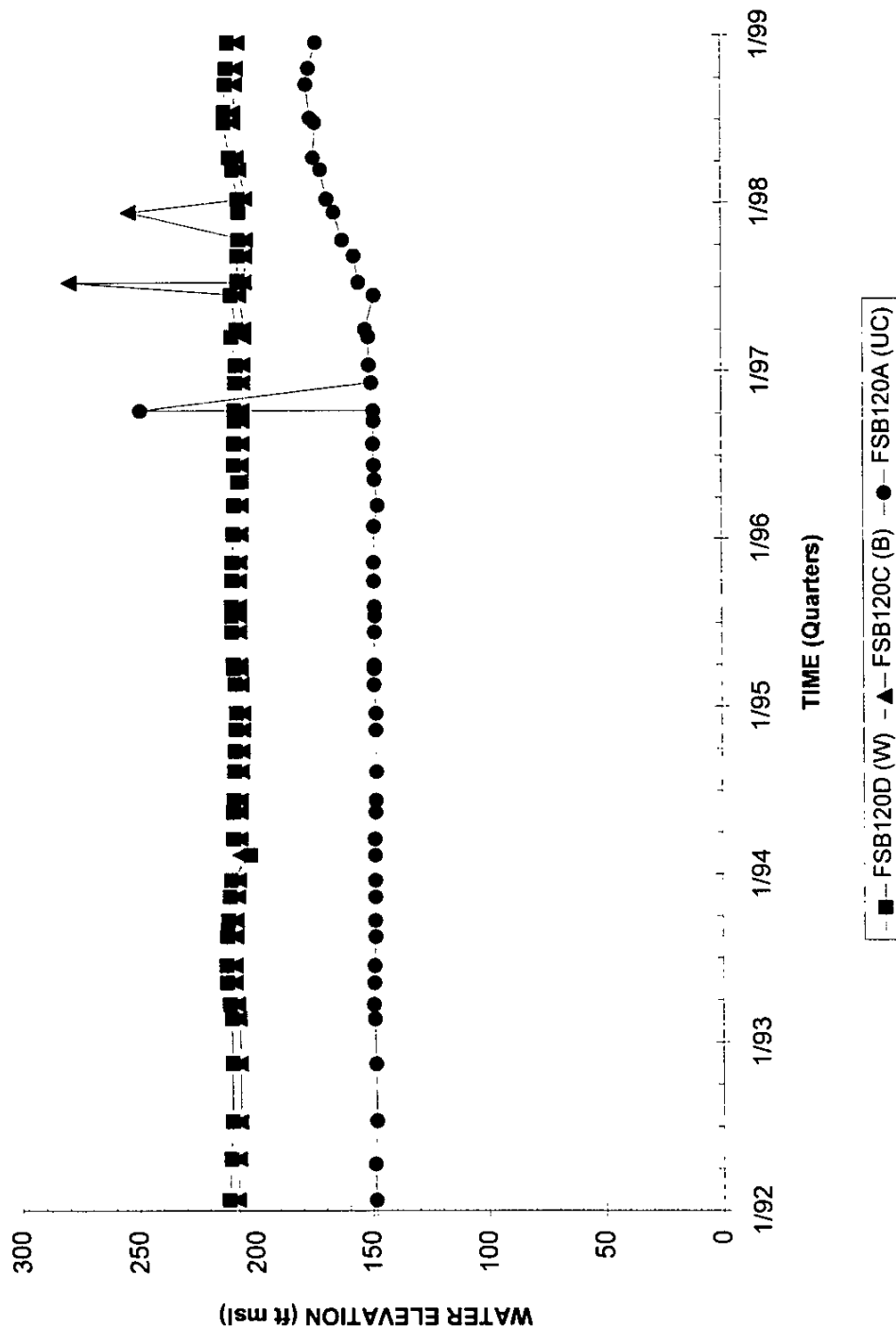
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IA); MC=Middle Congaree (IA); LC=Lower Congaree (IA)

# Hydrograph Well FSB119D



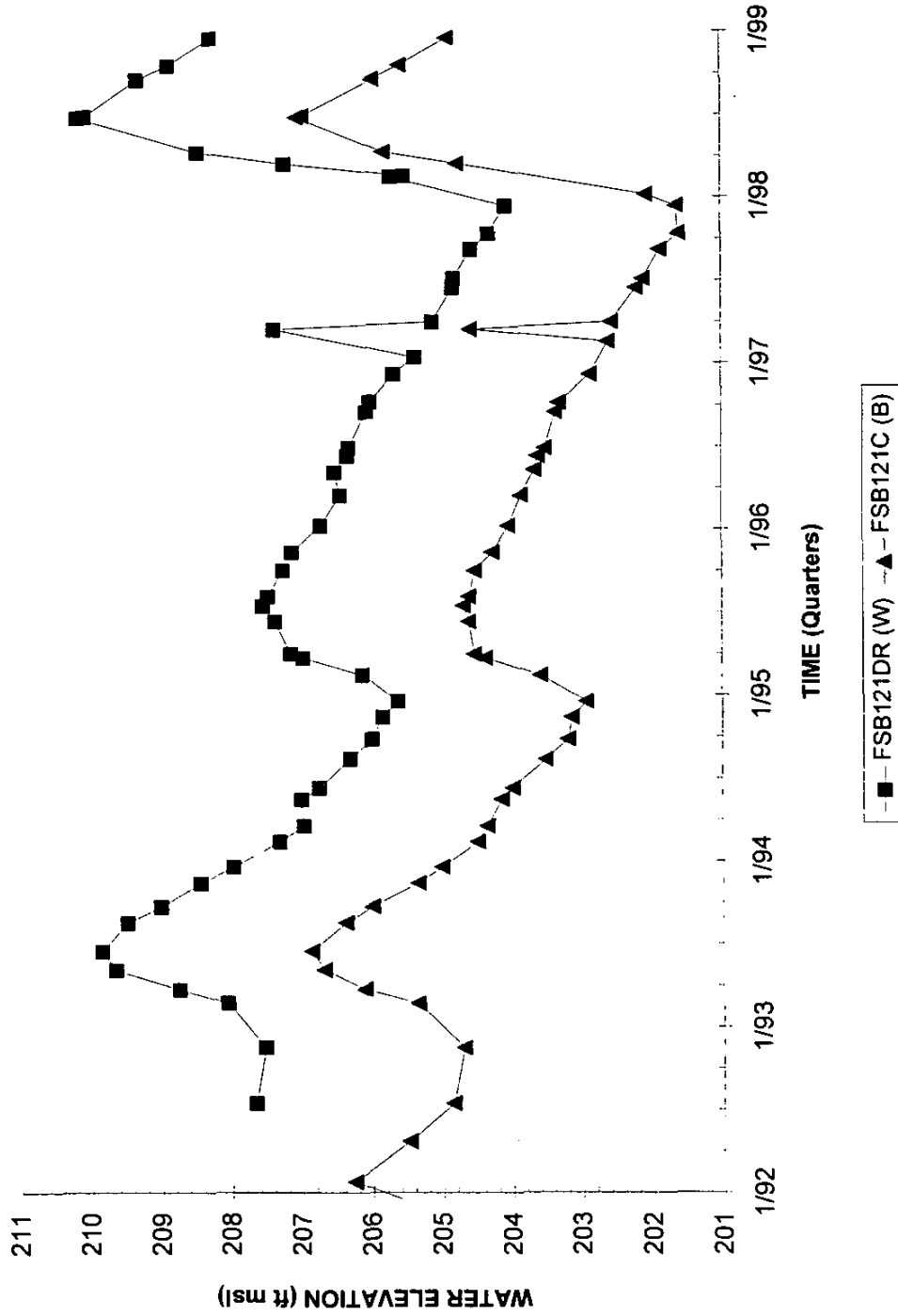
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB120



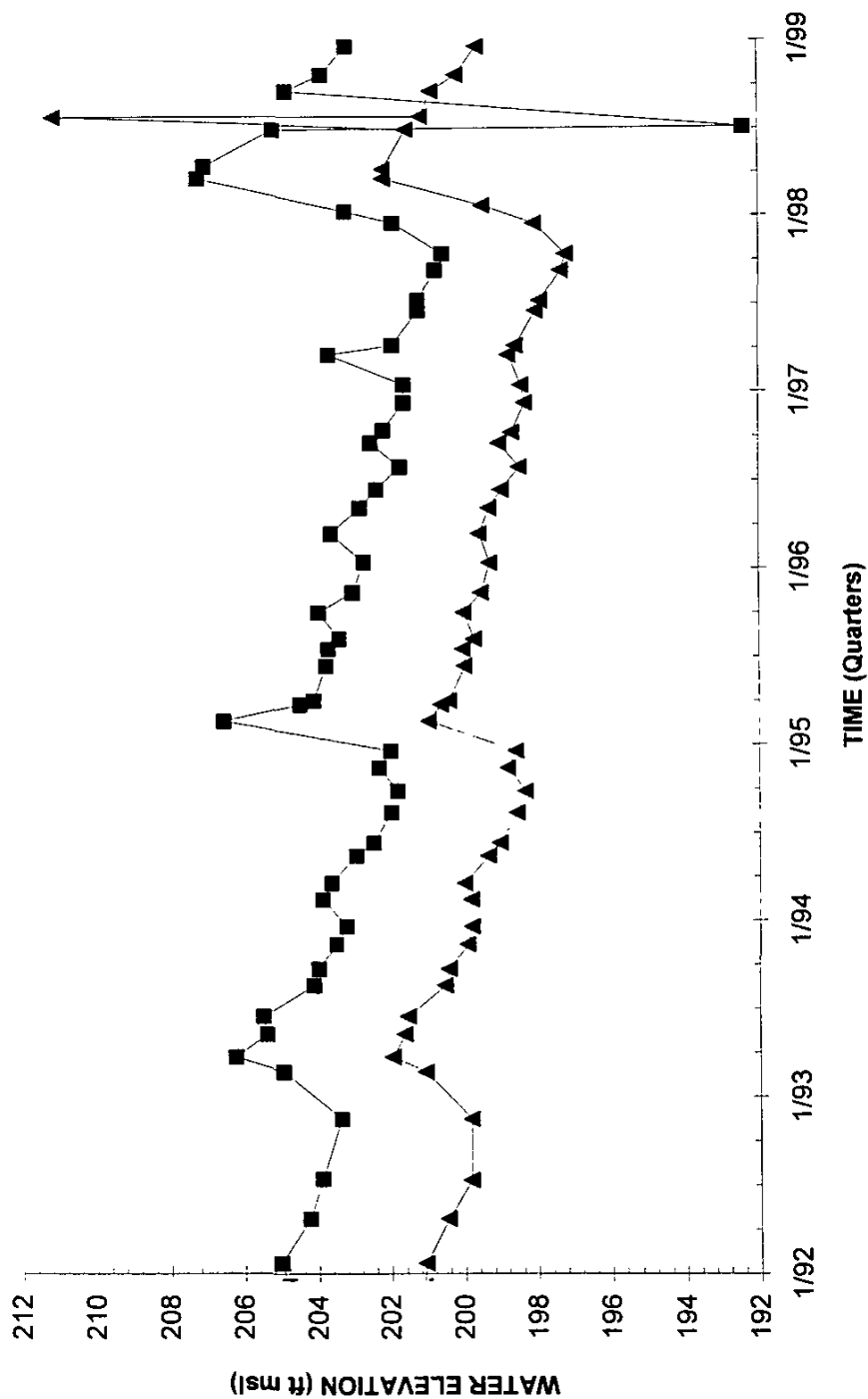
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB121



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well Cluster FSB122



—■— FSB122D (W) —▲— FSB122C (B)

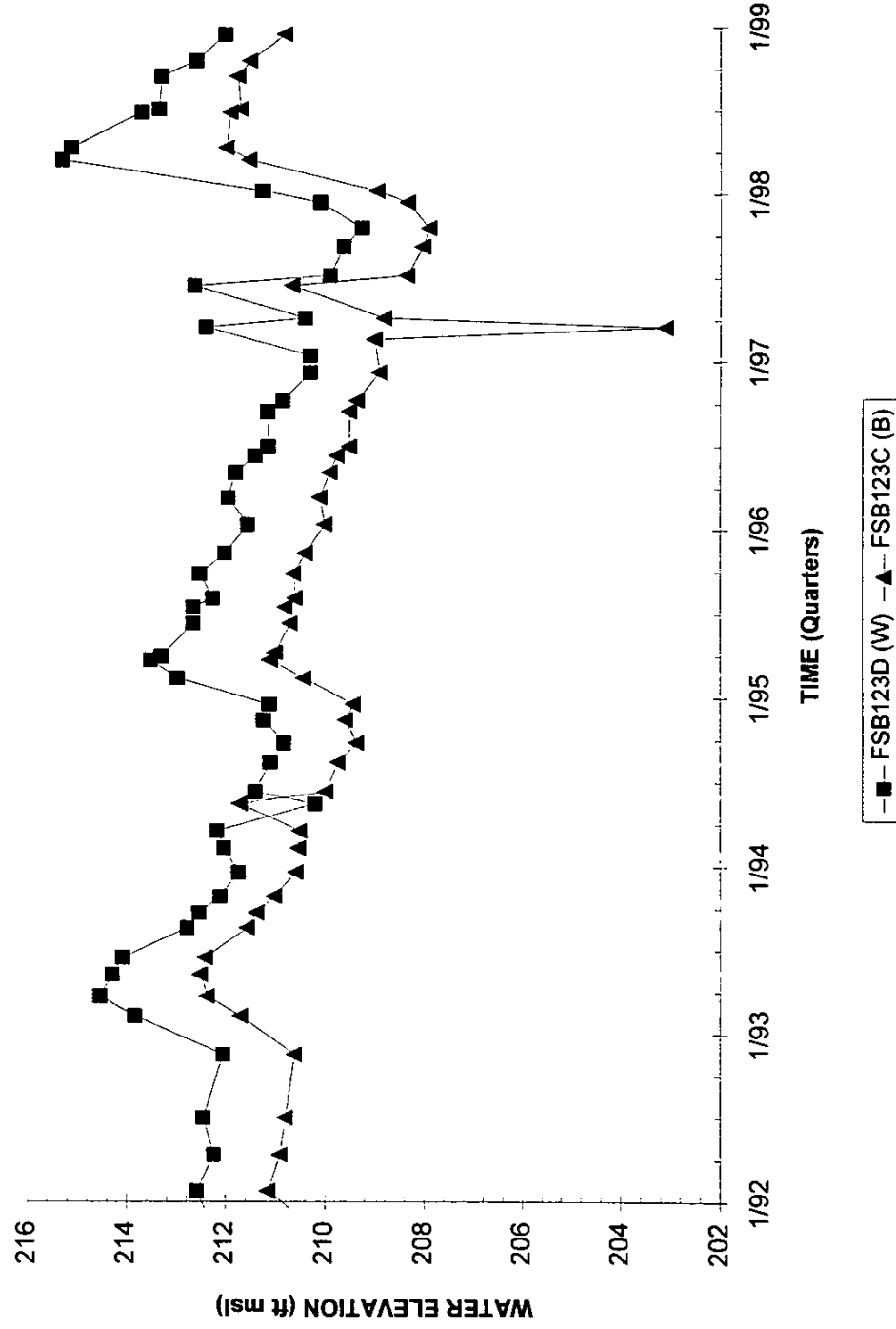
Note: W=Water Table (IB2); S=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 42

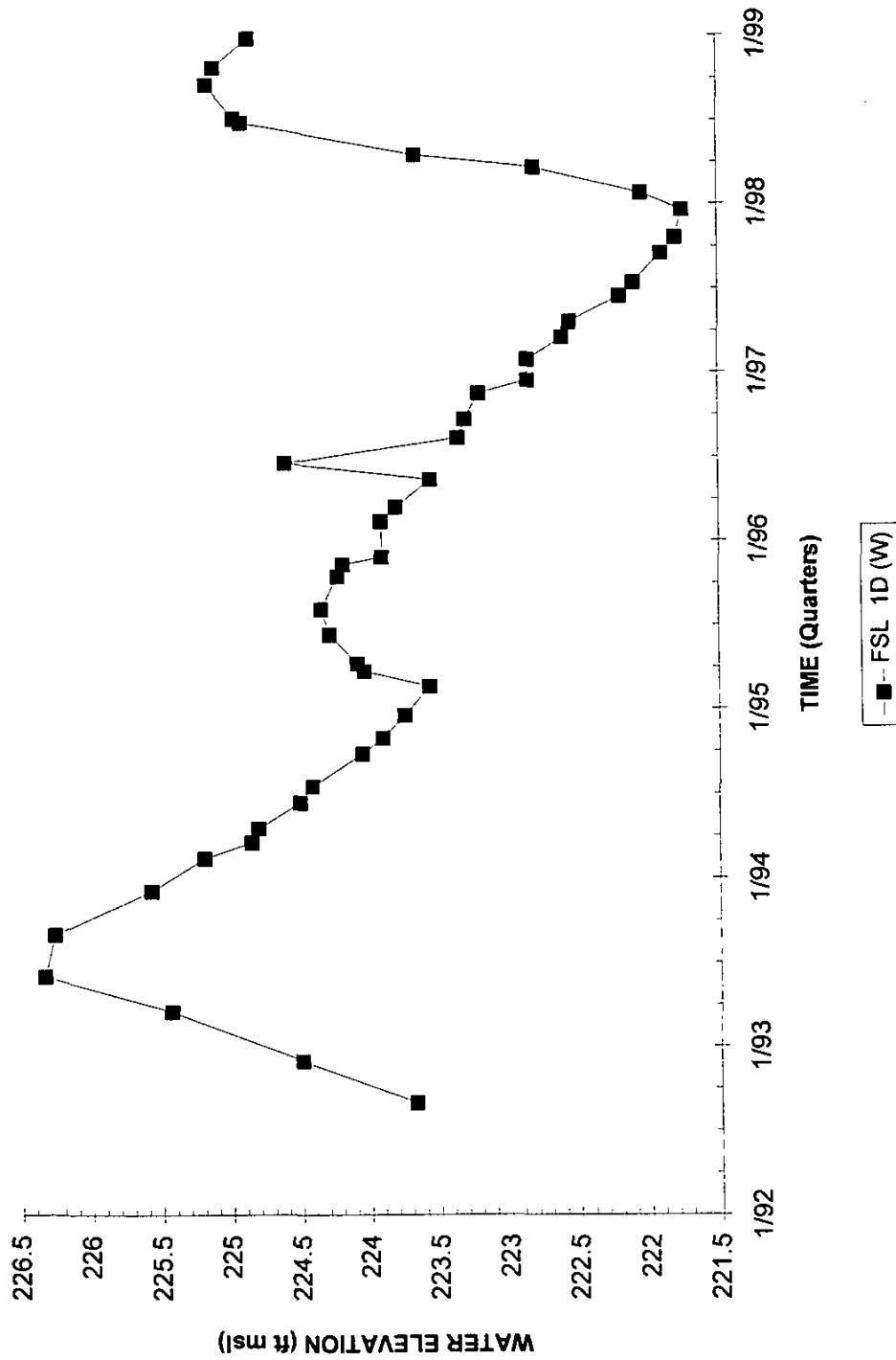
Third and Fourth Quarter 1998

# Hydrograph Well Cluster FSB123



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSL 1D



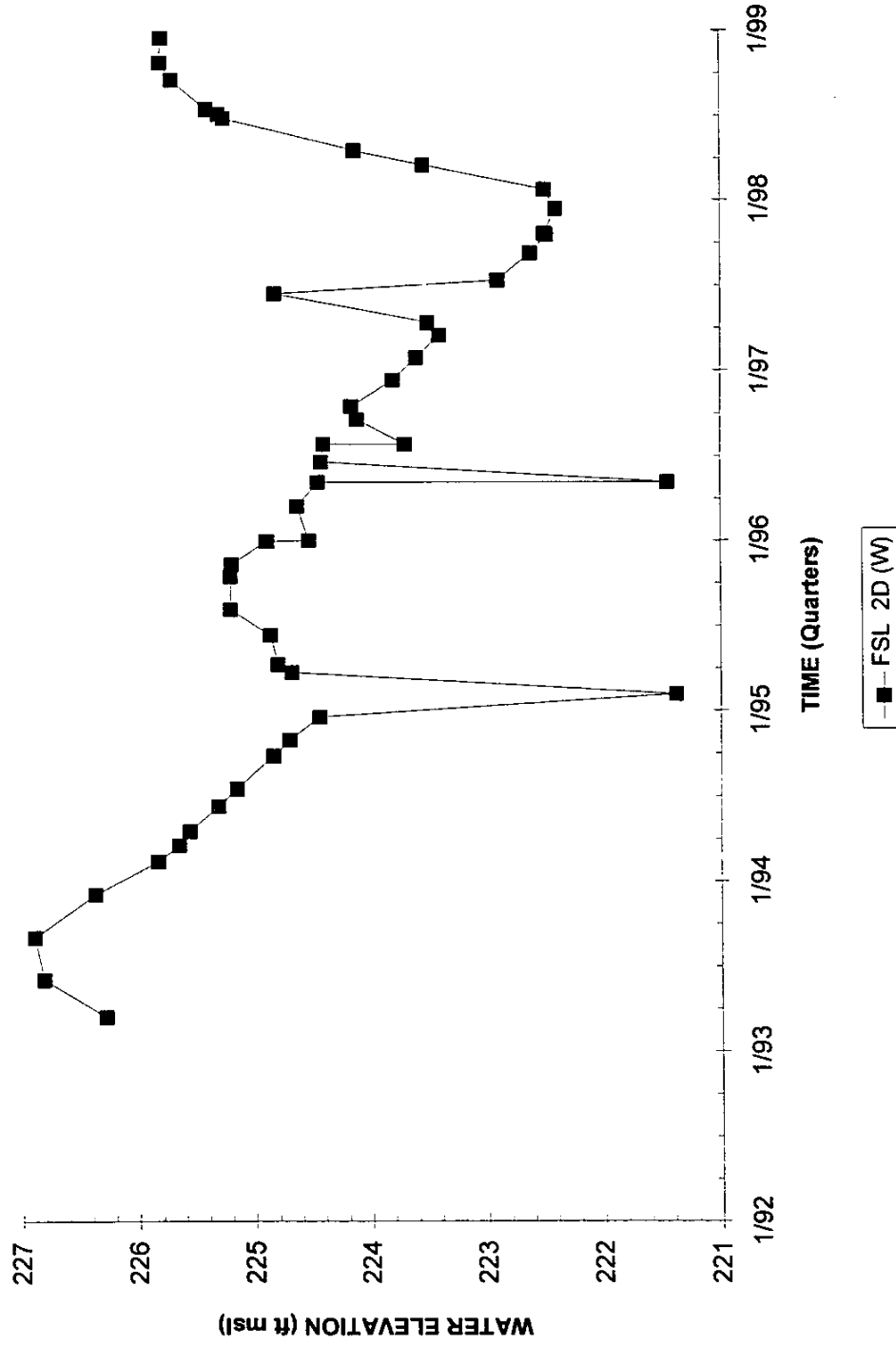
Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 44

Third and Fourth Quarter 1998

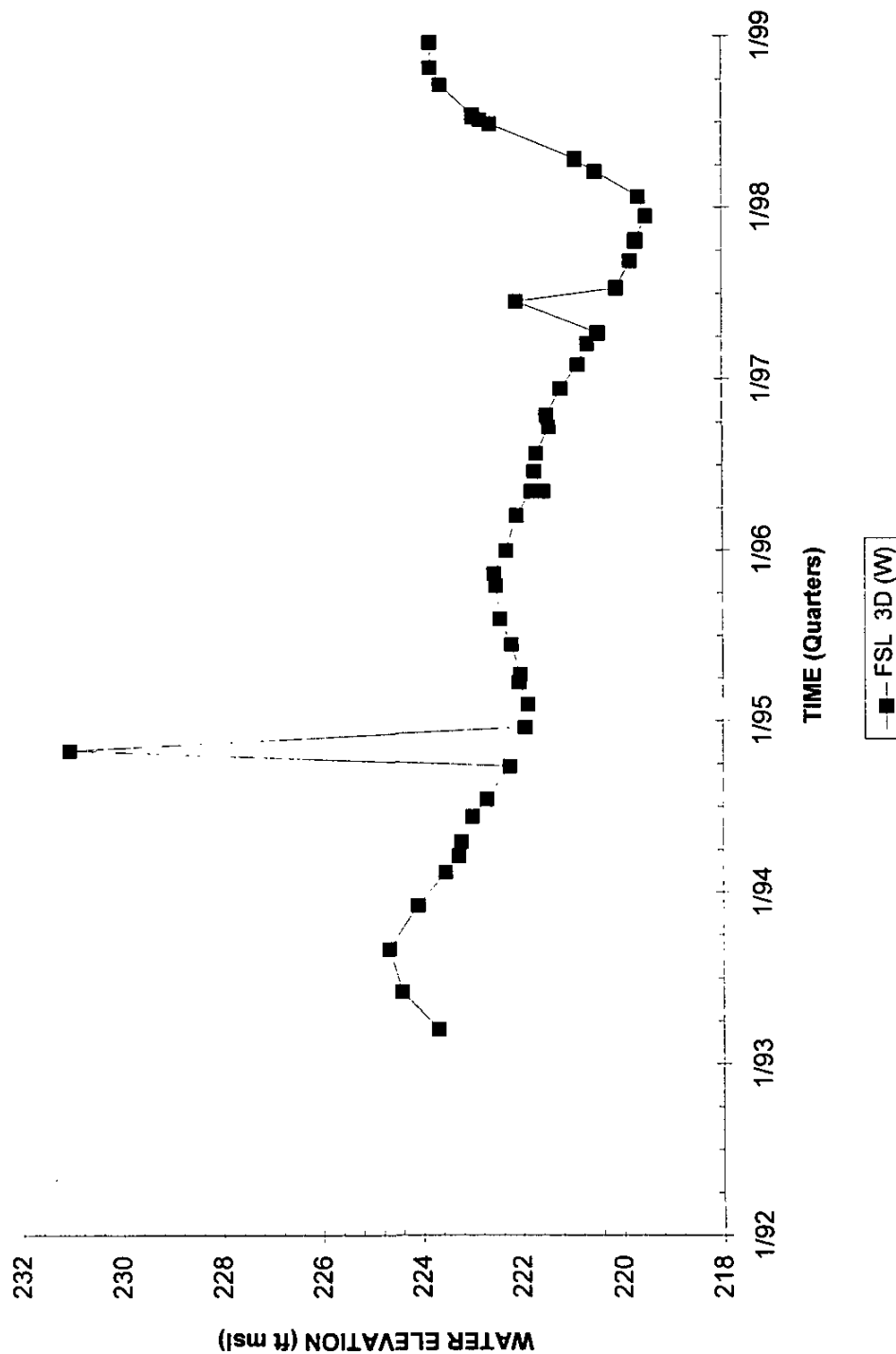
# Hydrograph Well FSL 2D



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

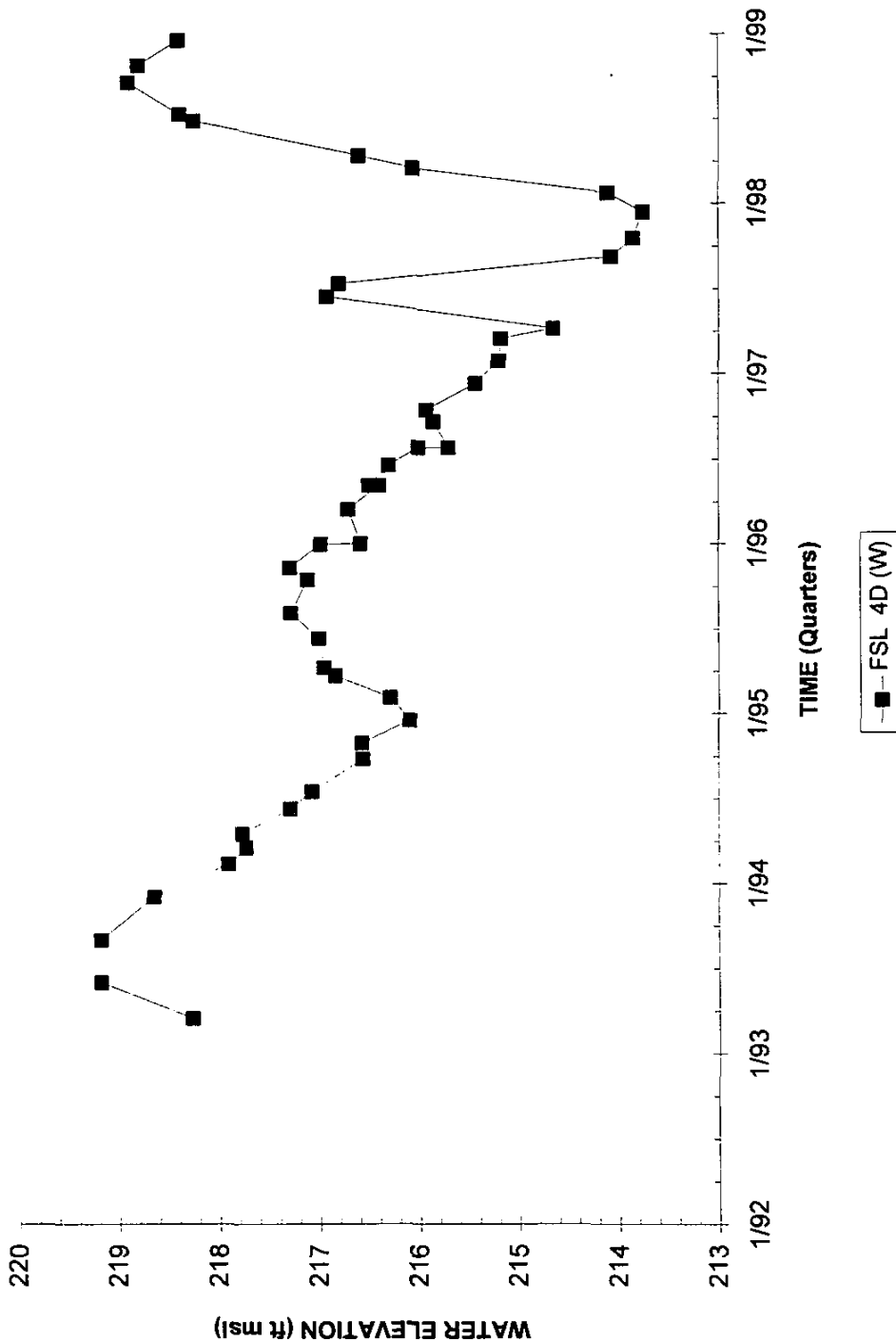


# Hydrograph Well FSL 3D



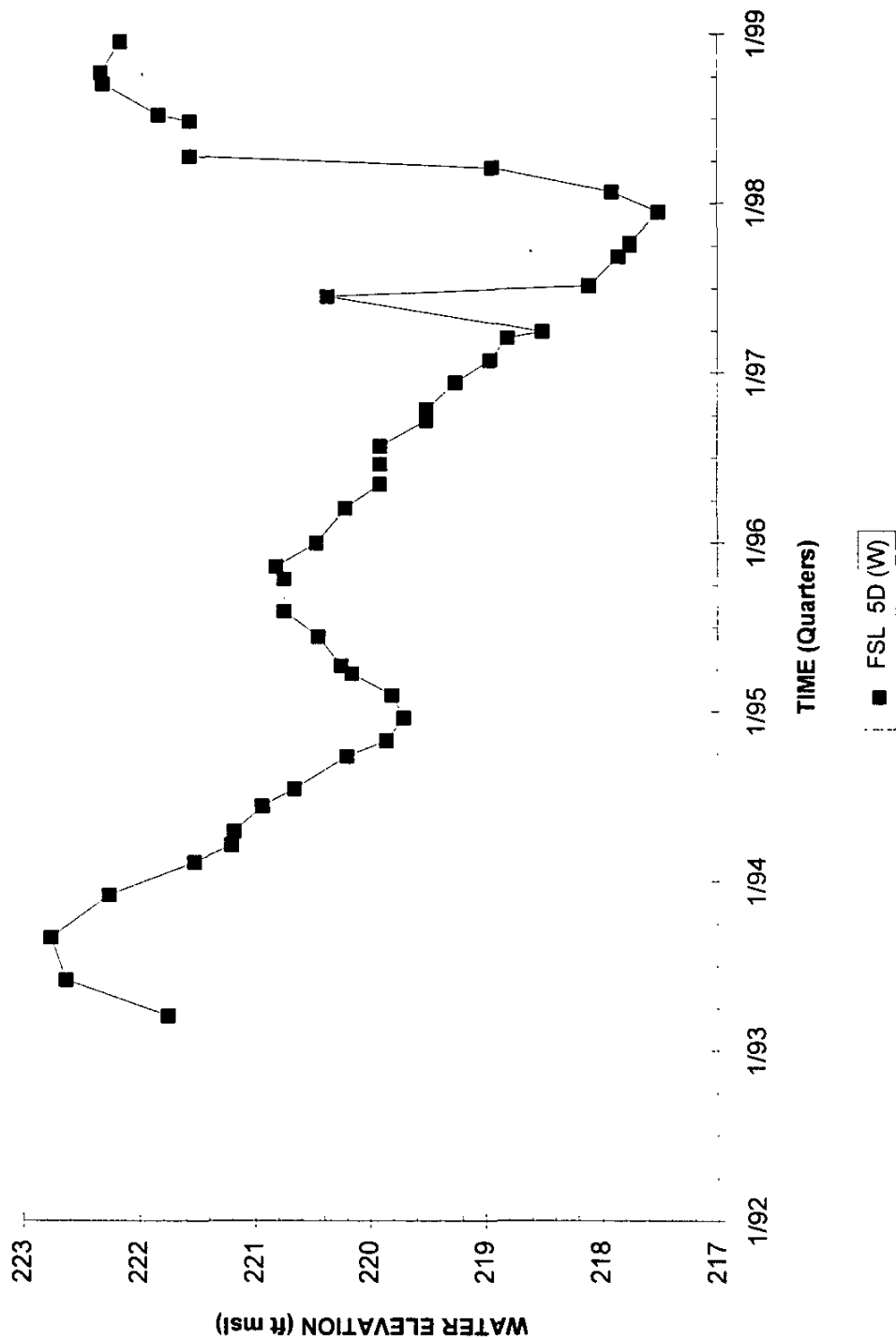
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSL 4D



Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSL 5D



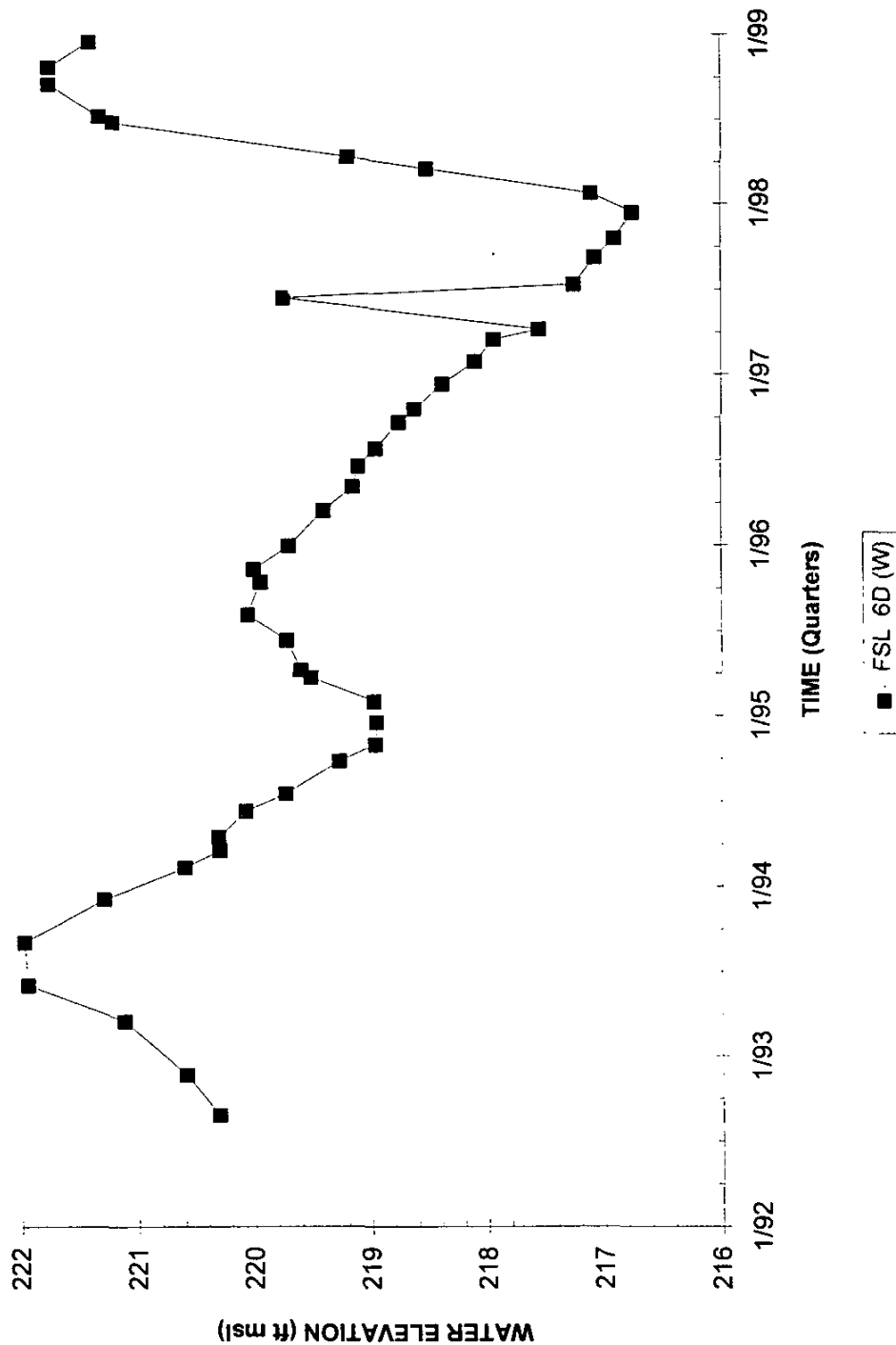
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 48

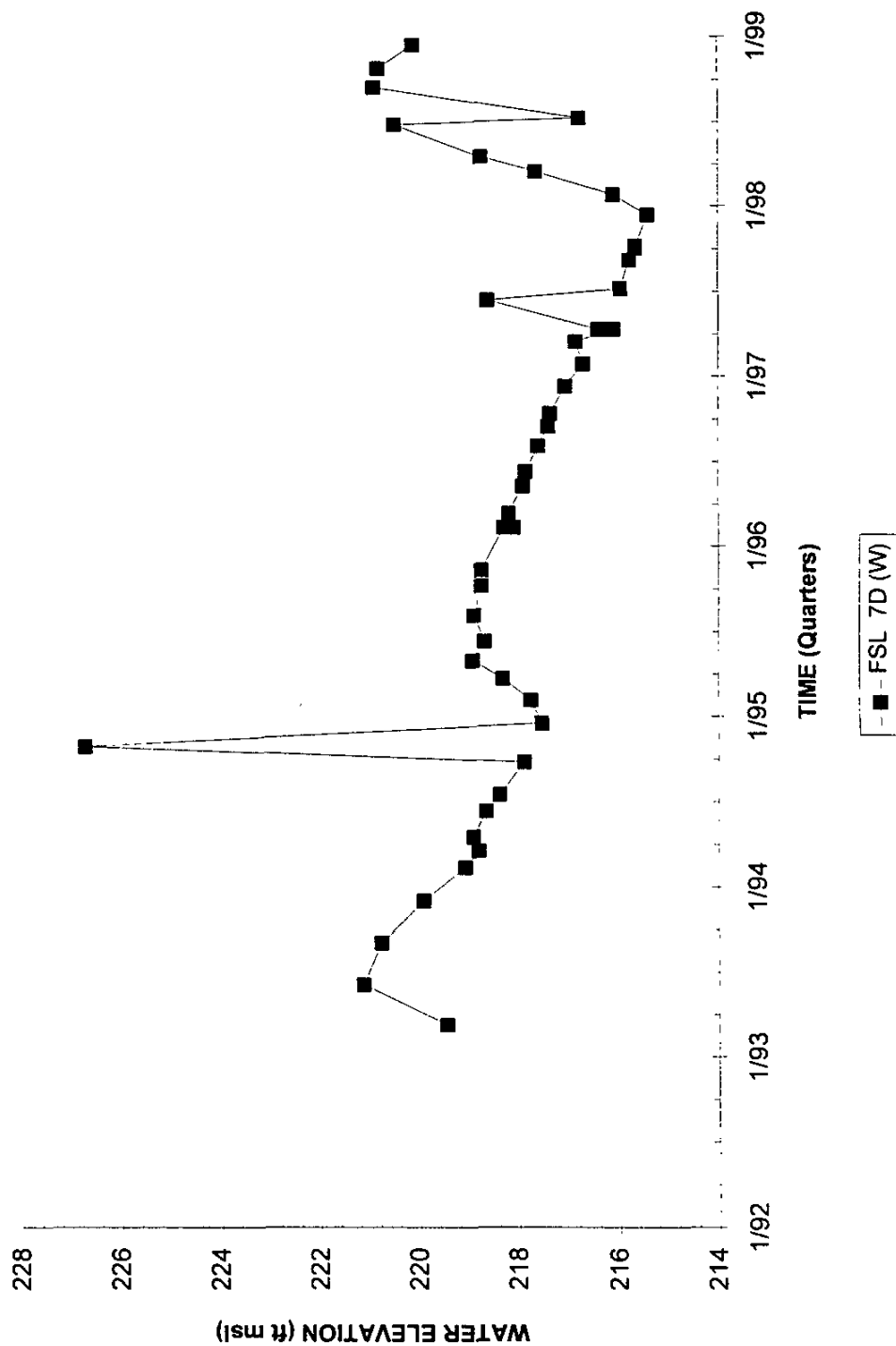
Third and Fourth Quarter 1998

# Hydrograph Well FSL 6D



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSL 7D



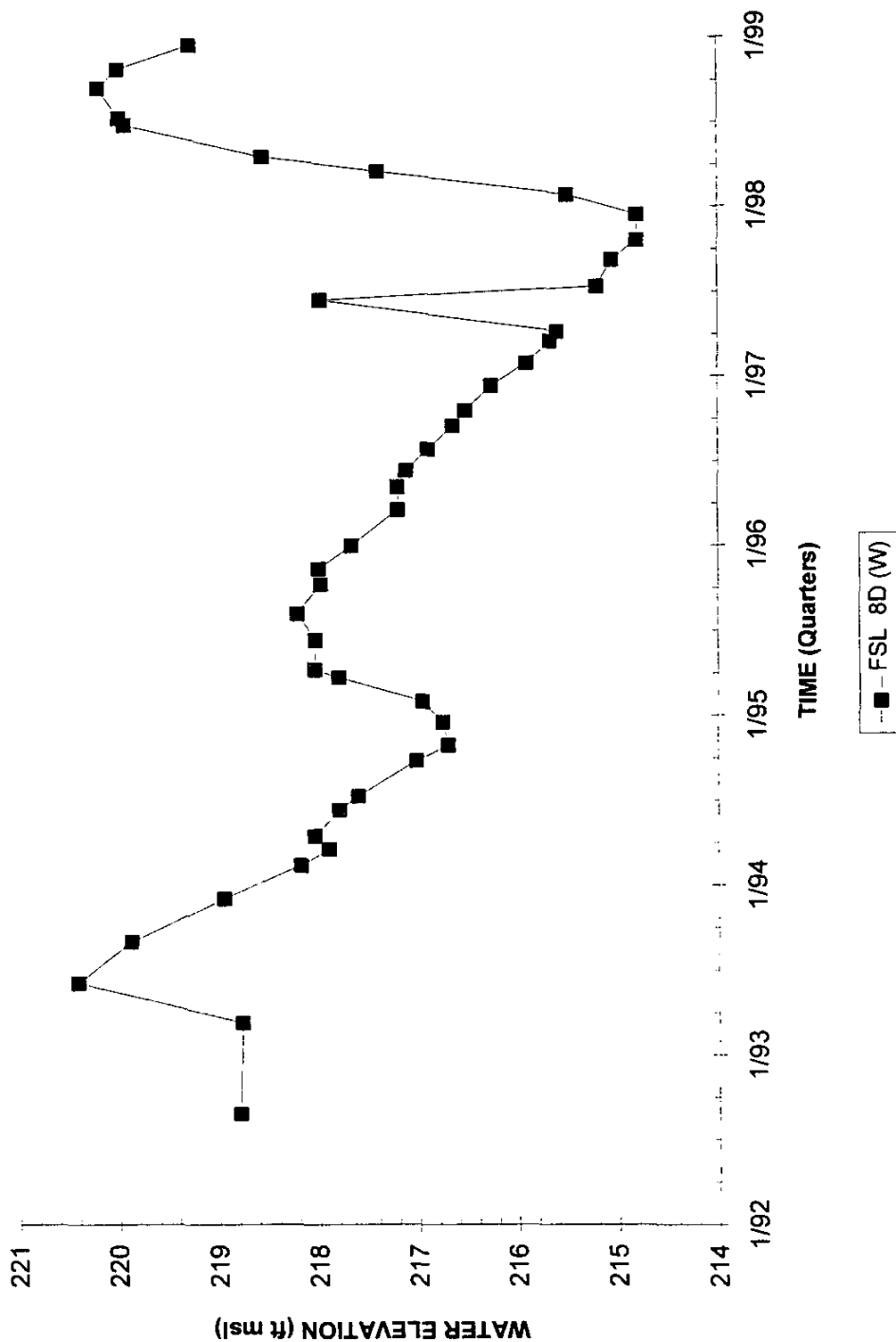
Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F-Area HWMF

E - 50

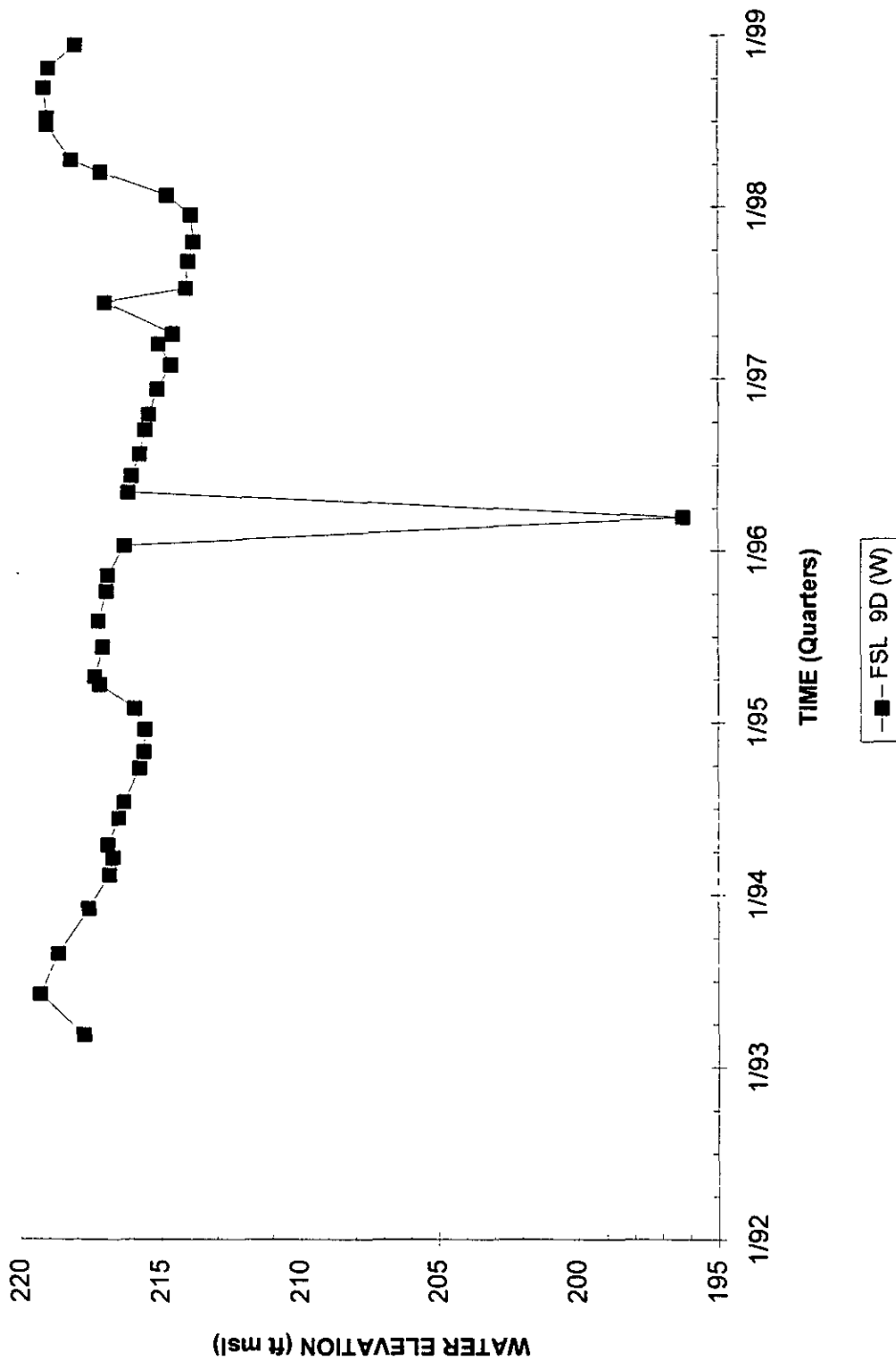
Third and Fourth Quarter 1998

# Hydrograph Well FSL 8D



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

# Hydrograph Well FSL 9D



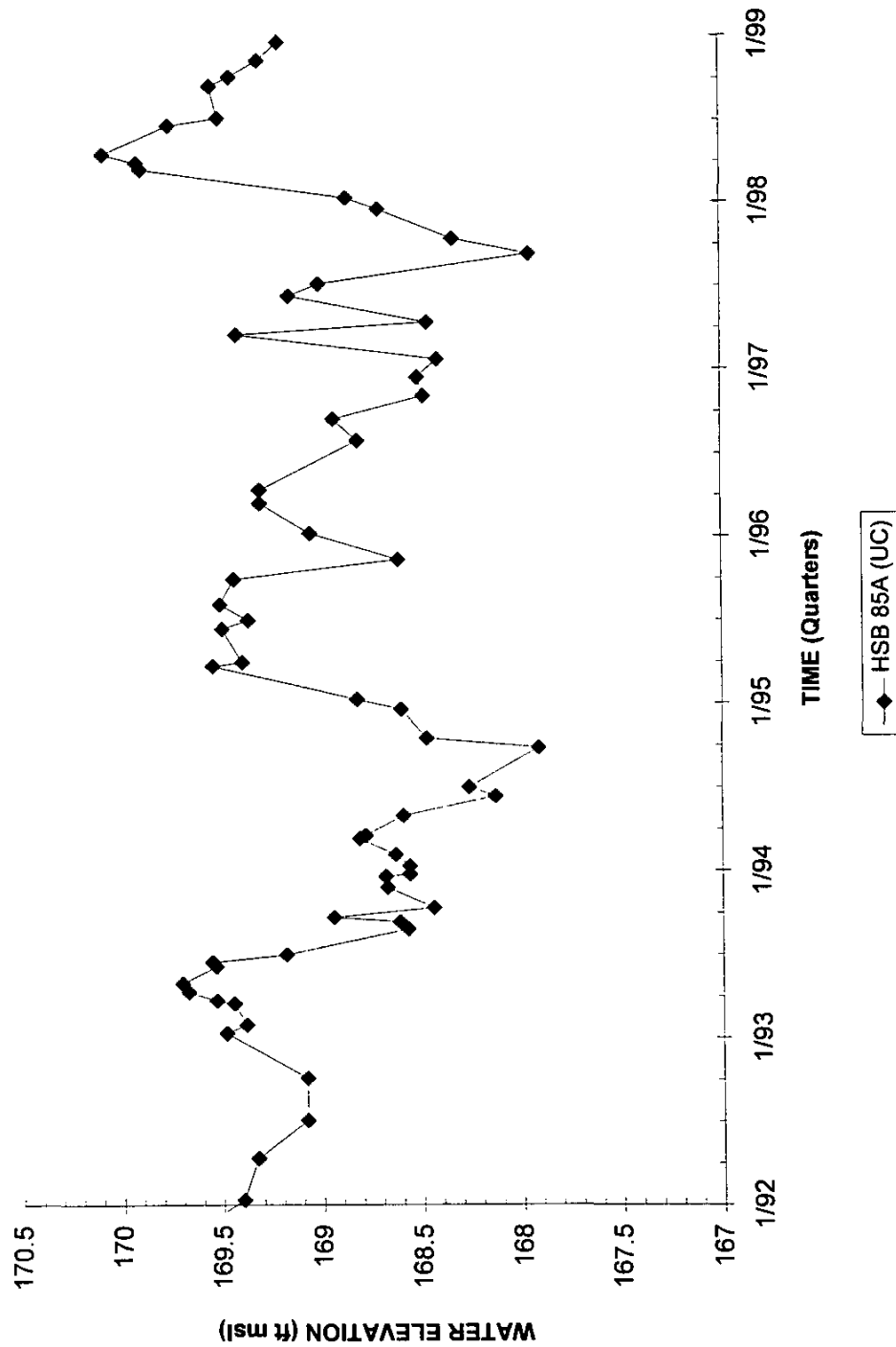
Note: W=Water Table (IIB2), B=Barnwell (IIB1), M=McBean (IIB1), UC=Upper Congaree (IIA), MC=Middle Congaree (IIA), LC=Lower Congaree (IIA)

F-Area HWMF

E - 52

Third and Fourth Quarter 1998

# Hydrograph Well HSB 85A



Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)



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