WSRC-TR-98-00003
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F-AREA HAZARDOUS WASTE MANAGEMENT FACILITY CORRECTIVE ACTION REPORT (U)

THIRD AND FOURTH QUARTER 1997

Volume I

Publication Date: March 1998

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Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

Prepared for the U.S. Department of Energy under Control Contract No. DE-AC09-89SR18035

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Key Words

**FSB and FSL wells
nitrate
nonvolatile beta
strontium-90
tritium**

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Executive Summary

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, the following constituents exceeded the Groundwater Protection Standard (GWPS) during the second half of 1997 in samples from monitoring wells at the F-Area HWMF: bis(2-ethylhexyl)phthalate, cadmium, cobalt, gross alpha, lead, mercury, nickel, nitrate-nitrite (as N), nonvolatile beta, phenols, radium-226, radium-228, thallium, total alpha emitters, total beta emitters, total radium, trichloroethylene, tritium, and vanadium.

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

At least one constituent exceeded GWPS in 37 (82%) of the 45 Water Table wells, 27 (84%) of the 32 Barnwell/McBean wells, and 12 (63%) of the 19 Congaree wells.

Tritium was the primary constituent detected above the GWPS; it was elevated in 65 (68%) 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 1997.

Isoconcentration maps included in Volume II of this report indicate both the concentration or activity and the extent of contamination during the second half of 1997 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 $1.6\text{E}+04$ pCi/mL in Water Table well FSB 79 during fourth quarter 1997. Maximum activities for other key indicator radionuclides were as follows: gross alpha at $2.3\text{E}+03$ pCi/L in Water Table well FSB 79 during fourth quarter, nonvolatile beta at $2.8\text{E}+03$ pCi/L in Barnwell/McBean well FSB 95CR during third quarter, and strontium-90 at $9.3\text{E}+02$ pCi/L in Barnwell/McBean well FSB 95CR during third quarter.

Uranium-233/234 had a maximum activity of $4.1\text{E}+02$ pCi/L in Barnwell/McBean well FSB 95CR during third quarter, and uranium-238 had a maximum activity of $8.0\text{E}+02$ pCi/L in Water Table well FSB 95DR during third quarter. Technetium-99 had a maximum activity of $3.4\text{E}+03$ pCi/L in Barnwell/McBean well FSB 95CR during third quarter.

Cadmium occurred at a maximum concentration of 50 $\mu\text{g/L}$ in Barnwell/McBean well FSB112C during third quarter 1997. Lead was found at a maximum concentration of 490 $\mu\text{g/L}$ in Water Table well FSB 104D during third quarter 1997, and nitrate-nitrite as nitrogen exceeded the GWPS in numerous wells during the second half of 1997, with a maximum concentration of 400,000 $\mu\text{g/L}$ in Barnwell/McBean well FSB 95CR during third quarter.

Water-level maps indicate that the groundwater flow rates and directions at the F-Area HWMF have remained relatively constant since the basins ceased to be active in 1988. Groundwater flow in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (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 flow rate in Aquifer Zone IIB₂ (Water Table) during third quarter 1997 ranged from approximately 320 to 360 ft/year and during fourth quarter 1997 from approximately 310 to 370 ft/year. The flow rate estimate in Aquifer Zone IIB₁ (Barnwell/McBean) ranged from approximately 91 to 160 ft/year during third quarter 1997 and from approximately 91 to 150 ft/year during fourth quarter 1997. The flow rate in Aquifer Unit IIA (Congaree) was estimated at 580 ft/year during third quarter 1997 and 550 ft/year during fourth quarter 1997.

The F-Area Groundwater Remediation Wastewater Treatment Units (WTU) facility operating permit was received on April 22, 1997, and shakedown activities began immediately. The WTUs operated in a shakedown mode during the third and fourth quarter 1997. Full-scale operations are anticipated to commence in late summer 1998.

Semiannual Corrective Action Report

Introduction

SRS monitors groundwater quality at the F-Area HWMF and provides results of this monitoring to the South Carolina Department of Health and Environmental Control (SCDHEC) semiannually as required by the RCRA permit. SRS also performs monthly sampling in accordance with Section C of the UIC application.

The facility 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 1995.

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

System Evaluation

The F-Area WTU continued in a shakedown mode during third and fourth quarter 1997. Approximately 1,596,416 gallons of water were treated and injected. 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. These efforts have included reviews of the treatment system by independent wastewater treatment experts and SRS personnel.

A "baseline" statistical evaluation was performed and is included in this report (Section IIIC.11.c.ix). Shewhart-CUSUM charts (Appendix F) are provided in accordance with the RCRA permit application. Water levels were analyzed for each of the point of compliance (POC) wells and a representative number of plume assessment wells to determine if current water levels fall within the range of the historical maximum and minimum elevations. Due to limited operations during 1997, no significant changes were identified. However, several trends in water quality were identified as discussed in Section IIIC.H.11.c.ix. Full-scale operations are expected to commence in late summer 1998. Once full-scale operations begin, a new statistical analysis will be performed to determine the impact on groundwater quality. This information will be presented in the 1998 annual report (March 1999).

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 1997 are presented in Table C-1 of Appendix C. Table C-1 includes field parameters and also identifies 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 EPA-approved holding times are noted by symbols in columns headed ST and H, respectively.

During the third quarter, well FSB 79 was not sampled due to an electrical problem, and well FSB 93D was not sampled because the pump was inoperable. Well FSB106D was not sampled because it was dry.

During the fourth quarter, well FSB 78A was not sampled because the pump was inoperable. Wells FSB106D and FSL 4D were not sampled because they were dry.

Flowmeter problems occurred at wells FSB 78 and FSL 4D during the third quarter and well FSB122D during both quarters. Consequently, the volume purged was estimated for these wells.

The problems identified with these wells are being addressed through the SRS routine well maintenance program.

Variable-speed pumps have been installed in wells at the F-Area HWMF 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 SRS and 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: cesium-137 results for FSB 94C due to low abundance of the isotope; cobalt-60 results for FSB 90C and 112C due to low abundance of the isotope; curium-245/246 results for FSB 90D, 92D, 94DR, 97C, 97D, 98C, 98D, 104D, 105DR, 107D, and 110D due to tailing or spectral resolution problems; iodine-129 results for FSB 96AR, 99A, 112A, and 122D due to low abundance of the isotope; technetium-99 results for FSB107D due to interference; thorium-228 results for FSB101A and 107D due to tailing or spectral resolution problems; thorium-230 results for FSB 78B, 89C, 92C, 94C, 101A, 107D, 118D, and 120C due to tailing or spectral resolution problems; and thorium-232 results for FSB 101A, 107D, and 118D due to tailing or spectral resolution problems.

Appendix IX Analyses

During third quarter 1997, Appendix IX analyses were performed as required by the RCRA permit. With the exception of constituents already listed on the RCRA permit's GWPS list, no constituents were reported above their detection limits in F Area.

Water Elevations

Synchronous water-level elevations were measured during third quarter and fourth quarter 1997 in compliance with Section IIIC.H.7 of the RCRA permit.

Average synchronous water elevations in the three hydrostratigraphic units beneath the F-Area HWMF for the past four quarters are shown in the following table.

Table 1. Average Water Elevations (ft msl) in the Hydrostratigraphic Units beneath the F-Area HWMF

Unit	1Q97	2Q97	3Q97	4Q97
Aquifer Zone IIB ₂ (Water Table)	210.85	209.19	209.32	209.22
Aquifer Zone IIB ₁ (Barnwell/McBean)	204.55	205.24	203.68	206.21
Aquifer Unit IIA (Congaree) ^a	154.67	154.73	154.17	159.44

^aAverages include water elevations from wells in the upper and lower portions of Aquifer Unit IIA (Congaree).

The water levels within each zone remained relatively constant throughout 1997.

During third quarter 1997, the average water elevation in Aquifer Zone IIB₂ (Water Table) rose 0.13 ft compared with second quarter 1997; the average water level in Aquifer Zone IIB₁ (Barnwell/McBean) fell 1.56 ft; and the average water level in Aquifer Unit IIA (Congaree) fell 0.56 ft.

During fourth quarter 1997, the average water elevation in Aquifer Zone IIB₂ (Water Table) fell 0.10 ft compared with third quarter 1997; the average water level in Aquifer Zone IIB₁ (Barnwell/McBean) rose 2.53 ft; and the average water level in Aquifer Unit IIA (Congaree) rose 5.27 ft.

A consistent vertical head relationship exists between the hydrostratigraphic units monitored at the F-Area HWMF. Flow potential is downward from Aquifer Zone IIB₂ (Water Table) to Aquifer Zone IIB₁ (Barnwell/McBean) and downward from Aquifer Zone IIB₁ (Barnwell/McBean) to Aquifer Unit IIA (Congaree). The heterogeneous nature of the confining zone that separates Aquifer Zone IIB₂ (Water Table) from Aquifer Zone IIB₁ (Barnwell/McBean) may influence vertical flow rates between these two units. A head reversal exists between the lower and upper portions of Aquifer Unit IIA (Congaree) at the F-Area HWMF, which indicates the potential for upward flow within the aquifer. This vertical head relationship between the different monitored units has remained essentially unchanged through past quarters.

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.

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. These 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 were 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 1997 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 1997 are located in Volume II. The maps illustrate groundwater flow patterns beneath the F-Area HWMF for third and fourth quarter 1997.

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 Volume II.

Groundwater Flow Rate and Direction (IIIC.H.11.c.vii)

Horizontal flow rate calculations provide a basis for estimates of the transport rate for constituents originating from the F-Area HWMF. Flow rates in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (Barnwell/McBean) are calculated along two flow paths. The flow paths, designated flow paths A and B, characterize the approximate maximum and minimum groundwater flow rates within these units in areas associated with the basins. The flow rate in Aquifer Unit IIA (Congaree) is calculated

along a single flow path because the flow rate within this unit is generally more uniform than in the overlying units.

Flow rates are 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 flow rate per day is calculated to two significant digits, then multiplied by 365 and rounded to two significant digits for the flow rate per year. Flow rate 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, flow rate estimates are accurate to an order of magnitude only.

Maximum horizontal flow rate estimates for the hydrostratigraphic units during third and fourth quarter are provided in the following table.

Table 2. Horizontal Groundwater Flow Rates (ft/year) in the Hydrostratigraphic Units beneath the F-Area HWMF

	Aquifer Zone IIB ₂ (Water Table)	Aquifer Zone IIB ₁ (Barnwell/McBean)	Aquifer Unit IIA (Congaree)
K_h (ft/day)	40	10.4	65
Effective porosity	20%	20%	20%
dh/dl	varies	varies	varies
Flow Rate (3Q97)	320–360	91–160	580
Flow Rate (4Q97)	310–370	91–150	550

These hydraulic conductivity values represent regional average hydraulic conductivities and may vary locally.

Flow in Aquifer Zone IIB₂ (Water Table) was south along both paths during third and fourth quarters 1997. Flow in Aquifer Zone IIB₁ (Barnwell/McBean) was south along both paths during third and fourth quarter 1997. Flow in Aquifer Unit IIA (Congaree) was west during third quarter 1997 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 quarters 1997 in the F-Area HWMF wells are noted in Table C-1 (Appendix C).

As shown in Table C-1, the following constituents exceeded the GWPS during the second half of 1997 in samples from monitoring wells at the F-Area HWMF: bis(2-ethylhexyl) phthalate, cadmium, cobalt, gross alpha, lead, mercury, nickel, nitrate-nitrite (as N), nonvolatile beta, phenols, radium-226, radium-228, thallium, total alpha emitters, total beta emitters, total radium, trichloroethylene, tritium, and vanadium.

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

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 nitrogen 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.

Sum of Beta Dose

The GWPS for the sum of beta-emitting radionuclides is two-fold:

- A simple summation of measured activities, not to exceed 50 pCi/L, and
- A summation of effective dose equivalents, not to exceed 4 mrem/yr

The preceding discussion and Table C-1 compare the sum of laboratory-reported results for detected beta emitters to the 50 pCi/L standard. Although dose is not measurable in the laboratory, it can be estimated from measured activities using the EPA-published (Federal Register, July 18, 1991, pp. 33120-33121) correlations of concentrations in water to 4 mrem/yr dose.

All 27 wells that exceed the 4 mrem standard also exceed the 50 pCi/L standard. However, wells FSB 93C and 120C exceed 50 pCi/L for the summed beta activity but do not exceed the 4 mrem/yr standard.

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, respectively. No constituents exceeded GWPS in the background wells during the second half of 1997.

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 POC wells and in a representative number of plume assessment wells.

Control charts have historically been used in industry and laboratories to determine whether 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 (EPA, 1989: Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance). SRS employed the Shewhart-CUSUM control chart method (EPA, 1989) to assess the effectiveness of corrective action (Appendix F). The charts identify both increasing and decreasing trends in the data and identify either sudden incursions (a contaminant slug) or steady drift (a change in plume concentration or size) conditions.

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 assessment wells, as follows:

FSB102C, 104C, 104D, 110C, 110D, 112C, 112D, 117D, 121C, and 121D

For this initial evaluation, background samples consisted of all samples between the first quarter of 1991 and 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 shakedown of remediation operations.

The procedure used to develop the control charts consists of three steps: (1) qualification and treatment of data, (2) Shewhart-CUSUM calculations, and (3) plotting of results. In general, the procedure outlined by EPA (1989) for generating control charts was used.

Qualification and Treatment of Data

The generation of a Shewhart-CUSUM chart begins with the calculation of background means and standard deviations for each constituent in each of the selected wells. EPA guidance (1989, 1992) requires a minimum of eight samples to assess background statistics, and the data must be independent and normally distributed with a fixed mean and constant variance. The Wilk-Shapiro Test of Normality was used (EPA, 1992: Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance). Control charts were not constructed for wells having data sets that failed the EPA criteria for normality and a minimum of eight data points. Background trends that exist in any constituent/well pairing would likely cause failure of the normality test, resulting in no further analysis.

Nondetects were handled as follows: if less than 25% of the samples were nondetects, the nondetects were not used. If the samples for a constituent/well pairing had greater than 25% nondetects, the nondetects were replaced with a value of one-half the detection limit.

Shewhart-CUSUM Calculations

The standard Shewhart-CUSUM control plot calculations begin with the calculation of the standardized mean, Z_i , for each time period, i , as follows:

$$Z_i = (X_i - \mu) \sqrt{n_i} / \sigma$$

where μ and σ are the mean and standard deviation of the background data, X_i is the average of the COC measurements during the sampling period being plotted, and n_i is the number of sampling events in the sampling period being plotted (EPA, 1989). The sampling period for all plots was quarterly. Based on the small number of multiple sampling events each quarter, the square-root term was removed from the above equation. An insignificant number of wells have been sampled more than once a quarter so the impact of this modification is expected to be minimal.

The cumulative sum, S_i , is then traditionally calculated as:

$$S_i = \max(0, (Z_i - k) + S_{i-1})$$

where k is a reference value set to 1 to allow changes of two standard deviations to be quickly detected (EPA, 1989). This formulation of the cumulative sum calculation, however, does not allow detection of decreasing trends. Since our use of the Shewhart-CUSUM control charts included monitoring of negative trends, an additional "negative cumulative sum", Sn_i , was calculated, as follows:

$$Sn_i = \min(0, (Z_i + k) + Sn_{i-1})$$

Thus, when the sample values are trending below the background mean, the "negative cumulative sum" will trend negative. A negative "out of control" situation occurs when the "negative cumulative sum" and/or the standardized mean exceeds the negatives of the control point parameters, SCL and h, respectively.

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. An explanation of the analyte codes used in these plots is given in Appendix F. Recommended (EPA, 1989) values for the h and SCL control point parameters have been used and plotted appropriately. To maintain clarity and uniformity in all the control plots, the y-axis ranges have been set to between -

8 to +8 standardized units. Standardized mean and cumulative sum values outside the plot limits have been truncated to the axes limit and plotted accordingly.

Along with the standardized mean and cumulative sum values, the background statistics (mean, standard deviation, and number of samples) are also given. The Wilk-Shapiro test statistic and Wilk quantile also are shown on each plot.

Due to the limited operation of the WTU and the minimal 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 or sudden breakthroughs (or sudden drops).

A number of the selected wells in F Area show gradual decreases in constituents, particularly the radioactive constituents. Analysis of the locations and timings of these trends suggest the decreases are due to the natural plume movement away from the basins and natural decay processes. Two wells showed increasing trends (FSB 99C in trichloroethylene and FSB109D in methylene chloride) in organic compounds which suggests an organic plume may be migrating into the F-Area Seepage Basins from upstream sources. Future monitoring analyses will be necessary to confirm this possibility. In addition, there are a number of plots that appear to indicate positive breakthrough of various constituents. However, close examination of the data reveals that these may be questionable one-time sample values. Future samples are needed to confirm these indications. These trends will be tracked throughout the quarterly sampling periods and reported in the annual corrective action reports.

Water level data were compared to the minimum and maximum background water level values to identify any significant changes. The minimum and maximum background water levels for the selected wells are given in Table 3.

Table 3. Minimum and Maximum Background Water Levels

Well Name	Minimum	Maximum	3rd Quarter Reading	4th Quarter 1st Reading	4th Quarter 2nd Reading
FSB 88C	211.00	218.51	210.45	210.19	210.35
FSB 88D	214.32	219.49	214.04	213.80	213.90
FSB 89C	210.39	214.57	209.79	209.63	209.75
FSB 89D	213.68	218.77	213.32	213.10	213.20
FSB 90C	209.42	214.56	208.51	208.40	208.50
FSB 90D	212.68	234.58	208.51	208.40	208.50
FSB 91C	209.38	213.65	208.70	208.70	208.68
FSB 91D	211.98	216.03	211.15	211.00	211.00
FSB 92C	208.77	211.23	207.50	207.46	207.50
FSB 92D	210.53	215.10	209.72	209.50	209.31
FSB 93C	207.67	211.43	206.80	206.68	206.85
FSB 93D	209.54	216.56	208.53	208.30	208.15
FSB 94C	207.03	210.72	205.81	205.60	205.80
FSB 94D	208.64	212.88	207.70	207.50	207.32
FSB 95C	206.15	210.02	205.22	205.15	205.10
FSB 95D	208.55	256.20	207.75	207.60	207.30

Well Name	Minimum	Maximum	3rd Quarter Reading	4th Quarter 1st Reading	4th Quarter 2nd Reading
FSB 96A	151.96	154.11	152.30	152.45	152.80
FSB 97A	151.46	154.57	151.31	151.45	151.75
FSB 97C	206.93	211.08	206.15	206.10	206.00
FSB 97D	209.38	213.66	208.63	208.45	208.12
FSB 98A	151.02	152.26	150.70	150.91	151.20
FSB 98C	200.63	212.49	206.90	206.55	206.75
FSB 98D	210.70	215.27	209.63	209.40	209.22
FSB 99A	149.52	151.62	149.84	150.35	150.30
FSB 99C	208.23	212.47	207.52	207.71	207.42
FSB 99D	208.29	215.09	210.73	210.60	210.45
FSB100A	150.11	152.34	150.72	150.70	151.13
FSB101A	150.61	152.84	151.10	151.05	151.35
FSB102C	194.63	195.91	194.35	194.20	195.19
FSB104C	199.80	202.86	199.20	199.36	199.90
FSB104D	200.42	206.31	202.91	202.70	203.55
FSB109D	207.50	216.75	211.35	211.20	211.05
FSB110C	195.81	203.52	199.25	199.40	199.83
FSB110D	204.15	208.56	203.67	203.50	203.90
FSB112C	200.58	203.80	199.57	199.42	200.10
FSB112D	204.54	208.19	203.58	203.30	203.70
FSB117D	203.85	206.94	203.05	202.90	203.45
FSB121C	202.92	206.67	201.87	201.60	201.62

Water-level elevations measured subsequent to the background time period that were outside of the minimum/maximum range are given in Table 4.

Table 4. Out-of-Range Water-Level Measurements

(Bolded values are third and fourth quarter 1997 out-of-range values.)

Well Name	Test Date	Test Value	Limit Type	Limit Value	Indicator
FSB 88C	07/22/97	210.60	Minimum	211.00	Below
FSB 88C	09/10/97	210.45	Minimum	211.00	Below
FSB 88C	10/20/97	210.19	Minimum	211.00	Below
FSB 88C	12/15/97	210.35	Minimum	211.00	Below
FSB 88D	09/10/97	214.04	Minimum	214.32	Below
FSB 88D	10/01/97	213.80	Minimum	214.32	Below
FSB 88D	12/15/97	213.90	Minimum	214.32	Below
FSB 89C	01/05/96	210.10	Minimum	210.39	Below

Well Name	Test Date	Test Value	Limit Type	Limit Value	Indicator
FSB 89C	04/08/97	210.15	Minimum	210.39	Below
FSB 89C	09/10/97	209.79	Minimum	210.39	Below
FSB 89C	10/20/97	209.63	Minimum	210.39	Below
FSB 89C	12/15/97	209.75	Minimum	210.39	Below
FSB 89D	09/10/97	213.32	Minimum	213.68	Below
FSB 89D	10/13/97	213.10	Minimum	213.68	Below
FSB 89D	12/15/97	213.20	Minimum	213.68	Below
FSB 90C	03/18/97	209.39	Minimum	209.42	Below
FSB 90C	04/08/97	209.00	Minimum	209.42	Below
FSB 90C	07/22/97	217.71	Maximum	214.56	Above
FSB 90C	09/10/97	208.51	Minimum	209.42	Below
FSB 90C	10/20/97	208.40	Minimum	209.42	Below
FSB 90C	12/15/97	208.50	Minimum	209.42	Below
FSB 90D	09/18/96	210.25	Minimum	212.68	Below
FSB 91C	04/29/96	209.10	Minimum	209.38	Below
FSB 91C	04/01/97	209.15	Minimum	209.38	Below
FSB 91C	04/02/97	209.15	Minimum	209.38	Below
FSB 91C	07/08/97	208.90	Minimum	209.38	Below
FSB 91C	07/08/97	208.90	Minimum	209.38	Below
FSB 91C	09/10/97	208.70	Minimum	209.38	Below
FSB 91C	10/01/97	208.70	Minimum	209.38	Below
FSB 91C	12/15/97	208.68	Minimum	209.38	Below
FSB 91D	10/07/96	182.65	Minimum	211.98	Below
FSB 91D	03/18/97	211.83	Minimum	211.98	Below
FSB 91D	04/01/97	211.65	Minimum	211.98	Below
FSB 91D	07/08/97	211.35	Minimum	211.98	Below
FSB 91D	09/10/97	211.15	Minimum	211.98	Below
FSB 91D	10/01/97	211.00	Minimum	211.98	Below
FSB 91D	12/15/97	211.00	Minimum	211.98	Below
FSB 92C	08/06/96	189.20	Minimum	208.77	Below
FSB 92C	10/04/96	208.60	Minimum	208.77	Below
FSB 92C	12/10/96	208.70	Minimum	208.77	Below
FSB 92C	01/02/97	208.15	Minimum	208.77	Below
FSB 92C	03/18/97	208.16	Minimum	208.77	Below
FSB 92C	04/01/97	207.90	Minimum	208.77	Below
FSB 92C	07/09/97	186.80	Minimum	208.77	Below
FSB 92C	09/10/97	207.50	Minimum	208.77	Below
FSB 92C	10/06/97	207.46	Minimum	208.77	Below
FSB 92C	12/15/97	207.50	Minimum	208.77	Below
FSB 92D	01/02/97	210.50	Minimum	210.53	Below
FSB 92D	03/18/97	210.21	Minimum	210.53	Below
FSB 92D	04/08/97	209.95	Minimum	210.53	Below
FSB 92D	09/10/97	209.72	Minimum	210.53	Below
FSB 92D	10/06/97	209.50	Minimum	210.53	Below
FSB 92D	12/15/97	209.31	Minimum	210.53	Below
FSB 93C	01/06/97	207.55	Minimum	207.67	Below
FSB 93C	03/18/97	207.48	Minimum	207.67	Below
FSB 93C	04/22/97	207.38	Minimum	207.67	Below
FSB 93C	07/22/97	207.10	Minimum	207.67	Below
FSB 93C	09/10/97	206.80	Minimum	207.67	Below

Well Name	Test Date	Test Value	Limit Type	Limit Value	Indicator
FSB 93C	10/20/97	206.68	Minimum	207.67	Below
FSB 93C	12/15/97	206.85	Minimum	207.67	Below
FSB 93D	12/10/96	209.50	Minimum	209.54	Below
FSB 93D	01/06/97	209.10	Minimum	209.54	Below
FSB 93D	01/07/97	209.10	Minimum	209.54	Below
FSB 93D	03/18/97	209.04	Minimum	209.54	Below
FSB 93D	04/14/97	208.90	Minimum	209.54	Below
FSB 93D	04/14/97	208.90	Minimum	209.54	Below
FSB 93D	07/10/97	208.60	Minimum	209.54	Below
FSB 93D	09/10/97	208.53	Minimum	209.54	Below
FSB 93D	10/14/97	208.30	Minimum	209.54	Below
FSB 93D	10/14/97	208.30	Minimum	209.54	Below
FSB 93D	12/15/97	208.15	Minimum	209.54	Below
FSB 94C	02/09/96	193.10	Minimum	207.03	Below
FSB 94C	12/10/96	206.78	Minimum	207.03	Below
FSB 94C	01/06/97	206.60	Minimum	207.03	Below
FSB 94C	01/07/97	206.60	Minimum	207.03	Below
FSB 94C	03/19/97	211.80	Maximum	210.72	Above
FSB 94C	04/14/97	206.30	Minimum	207.03	Below
FSB 94C	04/14/97	206.30	Minimum	207.03	Below
FSB 94C	07/10/97	206.15	Minimum	207.03	Below
FSB 94C	07/10/97	206.15	Minimum	207.03	Below
FSB 94C	09/10/97	205.81	Minimum	207.03	Below
FSB 94C	10/06/97	205.60	Minimum	207.03	Below
FSB 94C	10/07/97	205.60	Minimum	207.03	Below
FSB 94C	12/15/97	205.80	Minimum	207.03	Below
FSB 94D	02/09/96	206.45	Minimum	208.64	Below
FSB 94D	12/10/96	208.55	Minimum	208.64	Below
FSB 94D	01/06/97	208.40	Minimum	208.64	Below
FSB 94D	03/19/97	208.35	Minimum	208.64	Below
FSB 94D	04/08/97	208.10	Minimum	208.64	Below
FSB 94D	09/10/97	207.70	Minimum	208.64	Below
FSB 94D	10/06/97	207.50	Minimum	208.64	Below
FSB 94D	12/15/97	207.32	Minimum	208.64	Below
FSB 95C	01/07/97	206.10	Minimum	206.15	Below
FSB 95C	03/05/97	205.90	Minimum	206.15	Below
FSB 95C	03/19/97	206.00	Minimum	206.15	Below
FSB 95C	04/08/97	205.75	Minimum	206.15	Below
FSB 95C	07/09/97	205.45	Minimum	206.15	Below
FSB 95C	09/10/97	205.22	Minimum	206.15	Below
FSB 95C	10/06/97	205.15	Minimum	206.15	Below
FSB 95C	12/15/97	205.10	Minimum	206.15	Below
FSB 95D	01/07/97	208.40	Minimum	208.55	Below
FSB 95D	03/05/97	208.10	Minimum	208.55	Below
FSB 95D	03/19/97	208.18	Minimum	208.55	Below
FSB 95D	04/08/97	208.10	Minimum	208.55	Below
FSB 95D	09/10/97	207.75	Minimum	208.55	Below
FSB 95D	10/06/97	207.60	Minimum	208.55	Below
FSB 95D	12/15/97	207.30	Minimum	208.55	Below
FSB 97A	09/10/97	151.31	Minimum	151.46	Below
FSB 97A	10/24/97	151.45	Minimum	151.46	Below

Well Name	Test Date	Test Value	Limit Type	Limit Value	Indicator
FSB 97C	01/07/97	206.75	Minimum	206.93	Below
FSB 97C	04/08/97	206.45	Minimum	206.93	Below
FSB 97C	04/09/97	206.45	Minimum	206.93	Below
FSB 97C	07/09/97	206.10	Minimum	206.93	Below
FSB 97C	09/10/97	206.15	Minimum	206.93	Below
FSB 97C	10/07/97	206.10	Minimum	206.93	Below
FSB 97C	12/15/97	206.00	Minimum	206.93	Below
FSB 97D	02/09/96	207.80	Minimum	209.38	Below
FSB 97D	01/07/97	209.30	Minimum	209.38	Below
FSB 97D	01/08/97	209.30	Minimum	209.38	Below
FSB 97D	02/12/97	209.00	Minimum	209.38	Below
FSB 97D	02/12/97	209.00	Minimum	209.38	Below
FSB 97D	04/08/97	208.90	Minimum	209.38	Below
FSB 97D	07/09/97	208.70	Minimum	209.38	Below
FSB 97D	07/09/97	208.70	Minimum	209.38	Below
FSB 97D	09/10/97	208.63	Minimum	209.38	Below
FSB 97D	10/07/97	208.45	Minimum	209.38	Below
FSB 97D	10/07/97	208.45	Minimum	209.38	Below
FSB 97D	12/15/97	208.12	Minimum	209.38	Below
FSB 98A	09/10/97	150.70	Minimum	151.02	Below
FSB 98A	10/20/97	150.91	Minimum	151.02	Below
FSB 98D	02/09/96	210.40	Minimum	210.70	Below
FSB 98D	01/14/97	210.40	Minimum	210.70	Below
FSB 98D	04/09/97	209.90	Minimum	210.70	Below
FSB 98D	04/09/97	209.90	Minimum	210.70	Below
FSB 98D	07/02/97	209.70	Minimum	210.70	Below
FSB 98D	07/02/97	209.70	Minimum	210.70	Below
FSB 98D	09/10/97	209.63	Minimum	210.70	Below
FSB 98D	10/08/97	209.40	Minimum	210.70	Below
FSB 98D	10/08/97	209.40	Minimum	210.70	Below
FSB 98D	12/15/97	209.22	Minimum	210.70	Below
FSB 99A	07/14/97	287.00	Maximum	151.62	Above
FSB 99C	03/19/97	208.15	Minimum	208.23	Below
FSB 99C	04/03/97	208.10	Minimum	208.23	Below
FSB 99C	07/17/97	207.80	Minimum	208.23	Below
FSB 99C	09/10/97	207.52	Minimum	208.23	Below
FSB 99C	10/20/97	207.71	Minimum	208.23	Below
FSB 99C	12/15/97	207.42	Minimum	208.23	Below
FSB 99D	07/14/97	284.90	Maximum	215.09	Above
FSB101A	12/10/96	150.43	Minimum	150.61	Below
FSB102C	09/10/97	194.35	Minimum	194.63	Below
FSB102C	10/13/97	194.20	Minimum	194.63	Below
FSB104C	09/18/96	203.72	Maximum	202.86	Above
FSB104C	09/10/97	199.20	Minimum	199.80	Below
FSB104C	10/20/97	199.36	Minimum	199.80	Below
FSB109D	07/14/97	292.10	Maximum	216.75	Above
FSB110C	09/18/96	210.20	Maximum	203.52	Above
FSB110D	07/08/97	203.90	Minimum	204.15	Below
FSB110D	09/10/97	203.67	Minimum	204.15	Below
FSB110D	10/09/97	203.50	Minimum	204.15	Below

Well Name	Test Date	Test Value	Limit Type	Limit Value	Indicator
FSB110D	12/15/97	203.90	Minimum	204.15	Below
FSB112C	02/12/96	168.80	Minimum	200.58	Below
FSB112C	12/10/96	200.55	Minimum	200.58	Below
FSB112C	01/14/97	200.50	Minimum	200.58	Below
FSB112C	04/09/97	200.50	Minimum	200.58	Below
FSB112C	04/09/97	200.50	Minimum	200.58	Below
FSB112C	06/18/97	200.20	Minimum	200.58	Below
FSB112C	07/07/97	199.90	Minimum	200.58	Below
FSB112C	09/10/97	199.57	Minimum	200.58	Below
FSB112C	10/13/97	199.42	Minimum	200.58	Below
FSB112C	12/16/97	200.10	Minimum	200.58	Below
FSB112D	12/10/96	204.40	Minimum	204.54	Below
FSB112D	01/14/97	204.20	Minimum	204.54	Below
FSB112D	04/09/97	204.45	Minimum	204.54	Below
FSB112D	06/18/97	203.95	Minimum	204.54	Below
FSB112D	07/07/97	203.80	Minimum	204.54	Below
FSB112D	09/10/97	203.58	Minimum	204.54	Below
FSB112D	10/13/97	203.30	Minimum	204.54	Below
FSB112D	12/16/97	203.70	Minimum	204.54	Below
FSB117D	12/10/96	203.80	Minimum	203.85	Below
FSB117D	01/03/97	203.70	Minimum	203.85	Below
FSB117D	09/10/97	203.05	Minimum	203.85	Below
FSB117D	10/09/97	202.90	Minimum	203.85	Below
FSB117D	12/15/97	203.45	Minimum	203.85	Below
FSB121C	12/10/96	202.85	Minimum	202.92	Below
FSB121C	02/20/97	202.60	Minimum	202.92	Below
FSB121C	04/04/97	202.55	Minimum	202.92	Below
FSB121C	06/18/97	202.20	Minimum	202.92	Below
FSB121C	07/08/97	202.10	Minimum	202.92	Below
FSB121C	09/10/97	201.87	Minimum	202.92	Below
FSB121C	10/15/97	201.60	Minimum	202.92	Below
FSB121C	12/15/97	201.62	Minimum	202.92	Below

The majority of these out-of-range values can be attributed to the unusually low recharge season in 1997, resulting in historically lower groundwater levels. A few values are outliers (water levels significantly different than historical ranges) and should not be considered. The remaining values are only a few feet different from historical ranges and could be due to the operation of the remediation system wells. Due to the limited duration of remediation operations during the second half of 1997, the relationship between well operations and aquifer systems has not yet been established.

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

Due to the limited remediation operations, zone of capture and drawdown has 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)

The following table summarizes the pump rates, monthly volumes, and total volumes pumped from each extraction well during third and fourth quarter 1997. The pump rates represent the average pump rate for each well. The volumes are estimated due to instrument errors. SRS is implementing corrective measures to solve the instrumentation problems during the current WTU

major modification period. The well totals are based on recorded well performance and extraction totals.

Table 5. Volume Pumped (gallons) During the Second Half of 1997

Well	Rate (gpm)	July* 1997	August* 1997	September* 1997	October* 1997	November* 1997	December* 1997	Cum. Total
FEX 1	15	3,821	39,361	18,152	22,515	19,302	53,500	156,651
FEX 2	20	3,678	37,879	17,469	21,541	18,449	51,486	150,501
FEX 3	25	4,058	41,800	19,277	23,906	15,640	56,816	161,497
FEX 4	25	4,118	42,410	19,558	24,384	14,640	57,645	162,755
FEX 5	5	1,867	19,226	8,866	11,243	11,190	26,133	78,525
FEX 6	20	3,227	33,242	15,330	18,471	13,810	45,183	129,264
FEX 7	15	3,337	34,374	15,852	19,073	13,171	46,721	132,528
FEX 8	10	2,660	27,403	12,637	16,181	15,634	37,246	111,761
FEX 9	10	3,173	32,683	15,072	18,376	12,120	44,423	125,847
FEX 10	25	4,718	48,592	22,409	27,881	19,039	66,048	188,687
FEX 11	30	5,343	55,031	25,378	31,564	20,216	74,799	212,331
Total		40,000	412,000	190,000	235,136	173,211	560,000	1,610,347

Estimated due to instrument flow errors. Totals are based on recorded well performance and extraction totals.

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

The following table summarizes the pump rates, monthly volumes, and total volumes pumped from each injection well during third and fourth quarter 1997. The pump rates represent the average pump rate for each well. The volumes are estimated due to instrument errors. SRS is implementing corrective measures to solve the instrumentation problems during the current WTU major modification period. The well totals are based on recorded well performance and injection totals. The difference in total volume extracted (Table 5) and total volume injected (Table 6) is due to water retained in the WTU.

Table 6. Volume Injected (gallons) During the Second Half of 1997

Well	Rate (gpm)	July* 1997	August* 1997	September* 1997	October* 1997	November* 1997	December* 1997	Total
FIN 1	30	4,915	50,243	22,827	29,137	19,162	67,449	193,732
FIN 2	20	4,689	47,930	21,776	27,796	18,280	64,344	184,815
FIN 3	20	4,239	43,331	19,686	25,129	16,526	58,170	167,080
FIN 4	30	4,693	47,980	21,799	27,825	18,299	64,411	185,006
FIN 5	20	3,589	36,691	16,670	21,278	13,993	49,256	141,476
FIN 6	20	4,109	42,002	19,083	24,358	16,019	56,386	161,957
FIN 7	30	4,389	44,862	20,382	26,017	17,110	60,226	172,986
FIN 8	10	3,432	35,084	15,940	20,346	13,381	47,099	135,282
FIN 9	5	1,960	20,033	9,102	11,618	7,640	26,893	77,246
FIN 10	15	4,486	45,861	20,836	26,596	17,491	61,566	176,836
Total		40,500	414,016	188,100	240,100	157,900	555,800	1,596,416

Estimated due to instrument flow errors. Totals based on recorded well performance and injection totals.

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

The following table summarizes the rainfall data for F Area during third and fourth quarter 1997. Recharge to groundwater is estimated to be approximately 30% of rainfall in the General Separations Area.

Table 7. Rainfall (in.) and Recharge (in.) during the Second Half of 1997

	Jul. 1997	Aug. 1997	Sep. 1997	3-Month Total	Oct. 1997	Nov. 1997	Dec. 1997	6-Month Total
Rainfall	7.01	2.23	5.80	15.04	5.54	5.48	7.57	33.73
Recharge	2.10	0.67	1.74	4.51	1.67	1.64	2.27	10.12

Summary of System Downtime (IIC.H.11.c.xiv)

The F-Area WTU continued in a shakedown mode during third and fourth quarter 1997. The WTU has encountered several problems preventing full-scale operation. These problems have included excessive sludge production, chemical feed problems, water quality problems, and sludge handling difficulties. In addition, the valves designed to direct flow throughout the reverse osmosis (RO) portion of the WTU did not operate as designed. Consequently, the permeate piping exceeded its design pressure rating. These valves will be replaced and higher pressure rated piping will be installed prior to commencing full-scale operations.

SRS has initiated significant effort to correct the sludge and water quality problems. The F-Area WTU is still experiencing problems, and additional process improvements are anticipated prior to commencing full-scale operations. An additional sludge filter press, sludge tank, and filtrate return tank have been proposed to increase the sludge handling capacity. An ion exchange column has also been proposed to address the water quality concerns. Several independent wastewater treatment experts (including representatives from industry, academia, and the consulting fields) have been consulted to review the treatment system and recommend improvements. Full-scale operations are anticipated to commence late in the summer of 1998.

Table 8 summarizes the operations activities and downtime for third and fourth quarter 1997.

Table 8. Operations Activities and Downtime During the Second Half of 1997

Month	Run Percent	Hours Up	Hours Down	Dates Down	Explanation
July	1.1	8	736	1-15	Holiday, weekend, H-Area support
				17	Installation of polymer modification
				18-20	Weekend
				22-30	Spill on 7/21, repairs to polymer addition system
August	10.1	75	669	1-3	Weekend, well development
				5-6	Maintenance, Split 430 problems
				9-10	Weekend
				12	Sludge pump failure
				17	Preparation for 100-hour test
				19	Lightning strike halts 100-hour test
				23-24	Weekend
				25-27	Installation of new sludge pump
				30-31	Weekend
September	4.9	35	685	1	Holiday

Month	Run Percent	Hours Up	Hours Down	Dates Down	Explanation
				5	Examined clarifier, goo discovered, clarifier cleaned
				6-7	Weekend
				8	H-Area support
				10-11	Clarifier cleaned, TMT pump examined due to burn out, baffles removed
				13-14	Weekend
				19-30	Sludge problems in clarifier, H-Area modifications
October	4.0	30	714	1-8	H-Area support, system modifications
				11-12	Weekend
				16-31	Weekend, B31.3 piping issue, sludge carryover problems
November	5.0	36	684	1-2	Weekend
				3-7	B31.3 testing, clean reverse osmosis train A, flush A, disassemble membranes
				8-9	Weekend
				10-14	Flush reverse osmosis train A, calibrate flow meters, discovered valve caps in piping, calibrated Kates valves, support H-Area
				15-16	Weekend
				17-21	Prep work, calibrated Kates valves train C, B31.3 testing, clean/calibrate/maintain system train A
				22-23	Weekend
				27-30	Leak at filter press, holiday
December	15.7	117	627	2	Sludge pump problems
				6-7	Weekend
				9	Split 430 problems
				12	Sludge processing, housekeeping
				13-14	Weekend
				17-31	Sludge clean-up, holidays
Total	6.8	4416	301		

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

The F-Area WTU has experienced excessive sludge buildup in the clarifier since shakedown operations began in April 1997. Modifications to the F-Area WTU during third and fourth quarter 1997 basically consisted of modifications to the clarifier in an attempt to minimize the carryover problems. Carryover from the clarifier reached the ion exchangers, requiring frequent

backwashes and reducing the exchanger (resin) lifetime. Carryover from the clarifier is believed to be a cause of water quality problems for certain constituents.

The original piping arrangement was altered and a new sludge pump was added at the clarifier discharge in an attempt to resolve the carryover problem. A larger pump was added to allow delivery of more sodium hydroxide to the clarifier to improve its effectiveness. In addition, three baffles were removed from the clarifier to facilitate flow. The physical changes did not correct the problem. Consequently, a polymer addition system was added to the clarifier mixing chamber to improve flocculation and coagulation in an attempt to reduce clarifier carryover. This action also failed to correct the problem. Furthermore, membrane preservative and anti-scalant have been added to the system to improve the reverse osmosis membrane performance. Additional process modifications (equipment and chemistry) will be required to reduce the carryover and improve the treated water quality prior to commencing full-scale operations.

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

The F-Area WTU operated in a shakedown mode during third and fourth quarter 1997 but has not commenced full-scale operation. A statistical analysis was completed on the POC wells and a representative number of plume assessment wells, but this information basically serves 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 did identify groundwater trends for a few constituents, and this information is discussed in Section IIIC.H.11.b.ix of this report.

Underground Injection Control (UIC) Sampling Results

SRS collected samples to determine compliance with UIC standards as specified in the operating permit issued (4/17/97 for F Area and 5/19/97 for H Area). The results of these samples are presented in Appendix G. In accordance with the permit requirements, the initial operation of the unit proceeded in a batch mode. An initial run was processed and stored in the injection tank while analyses were performed. The first batch of treated groundwater met screening limits specified in the operating permit and was then released for injection upon approval by SCDHEC. Continuous operations were initiated, and monthly samples were then collected. In accordance with the operating permit, whenever any analyte exceeds its permitted standard, the next monthly sample is used as a confirmation sample. If the confirmation sample is elevated, the unit is shut down, and UIC staff members at SCDHEC are notified. SRS then proposes a corrective action to the treatment system, and, if approved, permission is granted to restart the unit.

The initial batch sample (June 1997) met the screening criteria for gross alpha, nonvolatile (gross) beta, strontium-90, and radium. The subsequent detailed analysis revealed that all measured constituents were under the required limits. Tetrachloroethylene and trichloroethylene were not analyzed due to a request for the wrong volatile constituents. Plutonium-238 was not analyzed due to a laboratory error. SCDHEC staff members were notified of these errors.

Other sampling and analytical errors have resulted in the following constituents not being analyzed or the analyses not complying with the permit. SCDHEC staff were notified upon discovery of each instance.

- July: Thallium and total phenols were not performed due to a sample request error. The detection limit for antimony was over the permit standard.
- August: Thallium and total phenols were not performed due to a sample request error. The detection limit for antimony was over the permit standard.
- September: The detection limits for antimony and thallium were over the permit standard.
- October: The detection limits for antimony and thallium were over the permit standard.
- November: The detection limits for antimony and thallium were over the permit standard.

December: Thallium and total phenols were not performed due to a sample request error resulting from the removal of these constituents from the H-Area permit. The detection limit for antimony was over the permit standard.

The following constituents were elevated over their permitted limits. The permit requirements were followed in each instance, and the unit was shut down, corrective actions were proposed, and permission was granted from SCDHEC prior to restart.

June: None.

July: None.

August: Gross alpha, iodine-129, the sum of the alpha contributors, and the sum of the beta contributors. Uranium was the primary elevated alpha constituent, and iodine-129, strontium-90, and technetium-99 were the primary elevated beta contributors.

September: The sum of the beta contributors and strontium-90. Iodine-129 was reported as an estimated result but was probably over the standard of 50 pCi/L. Radium-228 was also reported as an estimated result, but was reported as only slightly over the radium standard.

October: Gross beta, total radium, radium-228, strontium-90, and the sum of the beta contributors. Strontium-90 and technetium-99 were the primary elevated beta contributors. Iodine-129 was reported as an estimated value but was probably elevated over the 50 pCi/L limit.

November: Gross alpha, gross beta, total radium, iodine-129, radium-228, strontium-90, technetium-99, uranium-233/234, uranium-238, the sum of the alpha contributors, and the sum of the beta contributors.

December: Gross alpha, gross beta, total radium, carbon-14, iodine-129, radium-228, technetium-99, uranium-233/234, uranium-238, the sum of the alpha contributors, and the sum of the beta contributors. Strontium-90 was reported as an estimated value but was probably elevated over the 50 pCi/L limit.

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Appendix A

Groundwater Protection Standard

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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
<i>Inorganic Constituents</i>		
Antimony	6	µg/L
Arsenic	50	µg/L
Barium	2,000	µg/L
Cadmium	5	µg/L
Chromium	100	µg/L
Cobalt	3 ^a	µg/L
Copper	1,300	µg/L
Cyanide	20 ^b	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	3.5 ^a	µg/L
Zinc	5,000	µg/L
<i>Organic Constituents</i>		
Benzene	5	µg/L
Bis(2-ethylhexyl) phthalate	10 ^c	µg/L
Dichloromethane (methylene chloride)	5	µg/L
Phenols	2 ^d	µg/L
Tetrachloroethylene	5	µg/L
Trichloroethylene	5	µg/L
Trichlorofluoromethane	5 ^e	µg/L
<i>Radionuclide Constituents</i>		
Gross alpha	15	pCi/L
Nonvolatile beta	50 ^f	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 radium ⁹	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
<i>Section I, Inorganics</i>		
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
<i>Section II, Organics</i>		
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
<i>Section III, Radionuclides</i>		
Gross alpha	pCi/L	15
Gross beta	pCi/L	50
Total radium (226+228)	pCi/L	5
<i>Section IV, Radionuclides</i>		
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

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 IIB₂ (Water Table) Monitoring Wells at the F-Area HWMF

Figure 4. Location of Aquifer Zone IIB₁ (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 1 is a stratigraphic correlation chart showing three vertical columns representing different geological sections. The columns are labeled with 'NS' (North Sea) and 'C' (Cretaceous). The sections are divided into layers labeled 'A', 'B', 'C', and 'D'. Key data points include depths in feet (e.g., 209.22, 210.45, 215.25) and thicknesses (e.g., 151.20, 153.80, 155.05). A vertical scale on the right ranges from 10 to 210 feet. A horizontal scale at the top ranges from 10 to 320 feet. A diagonal line labeled '210' and a curved line labeled '155' are also shown.

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STRATIGRAPHIC CROSS - SECTION A

SAND PACK INTERVAL-INCLUDES
 BENTONITE SEAL
 SCREENED INTERVAL
 TD = TOTAL DEPTH
 GSA = GENERAL SEPARATIONS AREA
 NR = NO RECOVERY
 — = DELINEATES CONFINING ZONE
 AND UNIT BOUNDARIES
 GEOPHYSICAL CURVE = NATURAL GAMMA

F AREA SEEPAGE BASINS HYDROSTRAT

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F AREA SEEPAGE BASINS HYDROSTRAT

Geological cross-section A-A' showing three boreholes (FSB87, FSB99, FSB76) with stratigraphic columns, elevations, and depth markers. The section includes labels for 'BASIN F3 PROJECTED', 'SCALE IS EXAGGERATED IN THIS AREA FOR CLARITY', and various geological units (A, B, C, D, NS, BDL). A curved line labeled '8' is drawn across the section. A vertical scale on the right ranges from 10 to 320 feet.

Horizontal distances: 230' (FSB87 to FSB99), 270' (FSB99 to FSB76), 1150' (FSB87 to FSB76).

Vertical scale (feet): 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320.

Key features and labels:

- Boreholes:** FSB87 (Elev 283.6'), FSB99 (Elev 283.3'), FSB76 (Elev 291.5').
- Units:** A, B, C, D, NS, BDL.
- Depth Markers:** TD 261.0' (FSB87), TD 200.0' (FSB99), TD 276.0' (FSB76).
- Other Labels:** BASIN F3 PROJECTED, SCALE IS EXAGGERATED IN THIS AREA FOR CLARITY, 290, 160, 4.7, 12, 8, 290, 270, 260, 250, 240, 230, 220, 210, 200, 190, 180, 170, 160, 150, 140, 130, 120, 110, 100, 90, 80, 70, 60, 50, 40, 30, 20, 10.

F AREA SEEPAGE BASINS HYDROSTRAT

STRATIGRAPHIC CROSS — SECTION A

TD = TOTAL DEPTH
 GSA = GENERAL SEPARATIONS AREA
 NR = NO RECOVERY
 --- = DELINEATES CONFINING ZONE AND UNIT BOUNDARIES
 GEOPHYSICAL CURVE = NATURAL GAMMA

SCALE
 HORIZONTAL 0 100 200
 VERTICAL 0 5 10 15 20

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Appendix C

Groundwater Monitoring Results Tables

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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
ES	QST Environmental (was Environmental Science & Engineering until June 1997)
EX	EMAX Laboratories, Inc.
GE and GP	General Engineering Laboratories, Inc.
QR	Quanterra, 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
E	equipment blank was collected
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

Sampling Methods

B	sample collected using an open-bucket bailer
O	sample collected by method other than bailer or pump
P	sample collected using a bladder pump
S	sample collected using a single-speed centrifugal downhole pump
V	sample collected using a variable-speed pump

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

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.

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 (•) in the *H* (holding time) column indicates that holding time was exceeded. Analyses performed beyond holding times may not yield valid results.

The South Carolina Department of Health and Environmental Control (SCDHEC) allows only 15 minutes to elapse between sampling and analysis for pH. Thus, only field pH measurements can meet the holding time criterion; laboratory pH analyses always will exceed it.

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.

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. Modifiers designed by EPD/EMS and provided to the primary laboratories are defined below. These modifiers appear in the data tables under the column *Mod*. All lettered modifiers except *E* are based on EPA's STORET codes.

Modifiers

(Blank)	Data are not qualified. Numbers should be interpreted exactly as reported.
E	The detected result is between the sample-specific EQL and the method detection limit.
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> .
J	Value is estimated because quantitation in the sample or in associated quality control samples did not meet specifications.
L	Value is off-scale high. The actual value is not known but is known to be greater than the value shown.
R	Result was rejected because performance requirements in the sample analysis or associated quality control analyses were not met.
U	Material analyzed for but not detected. Analytical result reported is less than the sample quantitation limit.
V	Analyte was detected in an associated method blank.
Y	Result was obtained from an unpreserved or improperly preserved sample. Data may not be accurate.
1	Result may be an underestimation of the true value due to analytical bias.
2	Result may be an overestimation of the true value due to analytical bias.
3	The associated result may be of poor precision (high variability) due to analytical bias.
4	Matrix interference. Value cannot be determined. Used with <i>R</i> .

Note: These are only some of the qualifiers present in the database. All modifiers associated with the data are published in the result tables of EPD/EMS' quarterly groundwater monitoring reports, the official repository of the data.

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 (IIB2)

SAMPLE DATE	07/02/97	10/16/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	215.7	215.4	ft msl
pH	4.4	3.9	pH
Sp. conductance	100	145	µS/cm
Water temperature	21.5	20.2	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	4	1	NTU
Volumes purged	2.5	3.0	well volume
Sampling code			
Synchronous water level	215.5 (09/10/97)	215.25 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	2.1	1	JE			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	16	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	260	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	33	1		■		GE	32	1		■		GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	5,500	10				GE	10,000	10	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	63	1				GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	130	1	J1	■	●	GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76 (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>6.2E-02</i>	1	UI			GP	pCi/L							
Cesium-137	<i>1.7E+00</i>	1	UJI			GP	pCi/L							
Cobalt-60	<i>3.2E-01</i>	1	UI			GP	pCi/L							
Curium-242	<i>1.9E-02</i>	1	UI			GP	pCi/L							
Curium-243/244	<i>1.7E-01</i>	1				GP	pCi/L							
Curium-245/246	<i>8.9E-03</i>	1	UI			GP	pCi/L							
Gross alpha	<i>1.1E+01</i>	1				GP	pCi/L	2.7E+01	1		■		GP	pCi/L
Iodine-129	<i>9.1E-02</i>	1	UI			GP	pCi/L							
Nonvolatile beta	<i>1.0E+01</i>	1				GP	pCi/L	2.1E+01	1				GP	pCi/L
Plutonium-238	<i>1.1E-01</i>	1	UJIV			GP	pCi/L							
Plutonium-239/240	<i>3.4E-02</i>	1	UI			GP	pCi/L							
Radium-226	<i>6.7E+00</i>	1		■		GP	pCi/L							
Radium-228	<i>4.6E+00</i>	1	UIV			GP	pCi/L							
Strontium-90	<i>6.3E-01</i>	1	UI			GP	pCi/L							
Technetium-99	<i>2.2E+01</i>	1				GP	pCi/L							
Thorium-228	<i>9.2E-02</i>	1	UI			GP	pCi/L							
Thorium-230	<i>4.0E-01</i>	1	UIV			GP	pCi/L							
Thorium-232	<i>6.8E-02</i>	1	UI			GP	pCi/L							
Total alpha emitters	<i>5.7E-01</i>						pCi/L							
Total beta emitters	<i>2.2E+01</i>						pCi/L							
Total Radium (Ra-226 Plus Ra-228)	<i>6.7E+00</i>													
Tritium	<i>3.0E+02</i>	1		■		GP	pCi/mL	2.9E+02	1		■		GP	pCi/mL
Uranium-233/234	<i>2.7E-01</i>	1				GP	pCi/L							
Uranium-235	<i>7.3E-02</i>	1	UI			GP	pCi/L							
Uranium-238	<i>1.3E-01</i>	1				GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76A

<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>
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	07/02/97	10/16/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	154.9	154.7	ft msl
pH	6.6	6.1	pH
Sp. conductance	100	145	µS/cm
Water temperature	20.3	20.1	°C
Alkalinity as CaCO ₃	53	45	mg/L
Turbidity	1	1	NTU
Volumes purged	2.5	3.0	well volume
Sampling code			
Synchronous water level	154.6 (09/10/97)	155.05 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	0.68	1	JE			GE	1.4	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<50	1				GE	<40	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.5E-01	1	UI			GP	2.2E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	1.4E+00	1				GP	2.3E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	-4.3E-02	1	UI			GP	-6.9E-03	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76B

<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>
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	07/02/97	10/16/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	151.1	150.9	ft msl
pH	6.6	6.2	pH
Sp. conductance	100	155	µS/cm
Water temperature	20.0	20.6	°C
Alkalinity as CaCO ₃	57	63	mg/L
Turbidity	0	1	NTU
Volumes purged	3.2	2.5	well volume
Sampling code			
Synchronous water level	150.8 (09/10/97)	151.25 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	0.77	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	520	1				GE	510	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.5E-01	1	UI			GP	5.1E-01	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	8.1E-01	1	UI			GP	1.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.5E-01	1	UI			GP	6.7E-01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Bamwell (IIB1)

SAMPLE DATE	07/02/97	10/16/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	210.9	210.5	ft msl
pH	5.4	4.9	pH
Sp. conductance	46	48	µS/cm
Water temperature	19.7	20.0	°C
Alkalinity as CaCO ₃	8	15	mg/L
Turbidity	1	1	NTU
Volumes purged	3.0	2.8	well volume
Sampling code			
Synchronous water level	210.6 (09/10/97)	210.4 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<4.7	1				WA	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,300	1				GE	1,300	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 76C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.0E-01	1	UI			GP	2.2E+00	1				TM	pCi/L
Iodine-129													
Nonvolatile beta	1.1E+00	1	UI			GP	5.3E-01	1	J			TM	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.1E+00	1				GP	4.8E+00	1	J			TM	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/01/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	210.6	210.3	ft msl
pH	3.4	3.6	pH
Sp. conductance	580	320	µS/cm
Water temperature	24.9	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	2	NTU
Volumes purged	2.2	2.4	well volume
Sampling code			
Synchronous water level	210.4 (09/10/97)	190.1 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	4.1	1	JE			GE	3.1	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	210	1		■		GE	39	1		■		GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	58,000	40	V	■		GE	26,000	20		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 77 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	7.0E+02	1		■		GP	4.3E+02	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	1.3E+03	1	V	■		GP	5.5E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.3E+03	1		■		GP	5.6E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB2)

SAMPLE DATE	07/07/97	10/08/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	206.9	206.8	ft msl
pH	3.0	3.2	pH
Sp. conductance	980	1000	µS/cm
Water temperature	23.2	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	6	6	NTU
Volumes purged	2.3	3.2	well volume
Sampling code			
Synchronous water level	206.8 (09/10/97)	206.55 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	14	1		■		GE	12	1		■		GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	5.3	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	110,000	80	V	■		GE	110,000	80		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 78 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.1E+03	1		■		GP	8.9E+02	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	1.4E+03	1		■		GP	1.7E+03	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.8E+03	1		■		GP	4.5E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 78A

<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>
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	07/08/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	155.7	155.6	ft msl
pH	6.6		pH
Sp. conductance	100		µS/cm
Water temperature	20.7		°C
Alkalinity as CaCO ₃	49		mg/L
Turbidity	1		NTU
Volumes purged	2.8		well volume
Sampling code		PN	
Synchronous water level	155.4 (09/10/97)	155.88 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	0.73	1	JE			GE							µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	270	1				GE							µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 78A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.1E+00	1				GP							pCi/L
Iodine-129													
Nonvolatile beta	1.8E+00	1				GP							pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.7E+00	1	V			GP							pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/08/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	153.9	154.0	ft msl
pH	6.8	6.0	pH
Sp. conductance	200	160	µS/cm
Water temperature	20.5	19.0	°C
Alkalinity as CaCO ₃	80	32	mg/L
Turbidity	2	2	NTU
Volumes purged	2.7	2.5	well volume
Sampling code			
Synchronous water level	153.8 (09/10/97)	154.22 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	34	1	V			GE							µg/L
Cadmium, total recoverable	0.34	1	JE			GE	<0.29	1	V			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.0	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,400	5				GE	5,400	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	6.3	1	V	■		GE							µg/L
Zinc, total recoverable	<5.5	2	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 78B (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.5E-02	1	UI			GP							pCi/L
Cesium-137	5.7E-01	1	UJI			GP							pCi/L
Cobalt-60	-2.2E-01	1	UI			GP							pCi/L
Curium-242	1.4E-02	1	UI			GP							pCi/L
Curium-243/244	5.2E-02	1	UI			GP							pCi/L
Curium-245/246	0.0E+00	1	UI			GP							pCi/L
Gross alpha	2.4E+00	1				GP	2.5E+00	1				GP	pCi/L
Iodine-129	9.1E-01	1	UI			GP							pCi/L
Nonvolatile beta	3.3E+00	1				GP	1.4E+00	1				GP	pCi/L
Plutonium-238	6.0E-02	1	UI			GP							pCi/L
Plutonium-239/240	2.7E-02	1	UI			GP							pCi/L
Radium-226	5.3E-01	1				GP							pCi/L
Radium-228	4.4E+00	1	UIV			GP							pCi/L
Strontium-90	1.3E+00	1	UJI			GP							pCi/L
Technetium-99	8.0E+00	1	UI			GP							pCi/L
Thorium-228	2.5E-02	1	UI			GP							pCi/L
Thorium-230	4.9E-01	1	RV4			GP							pCi/L
Thorium-232	3.3E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Total radium													
(Ra-226 plus Ra-228)	5.3E-01												pCi/L
Tritium	1.5E+02	1		■		GP	1.2E+02	1		■		GP	pCi/mL
Uranium-233/234	9.5E-02	1	UI			GP							pCi/L
Uranium-235	2.3E-02	1	UI			GP							pCi/L
Uranium-238	9.5E-02	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Bamwell (IIB1)	
SAMPLE DATE		07/11/97	10/14/97				
FIELD DATA							
<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>				<u>Unit</u>	
Water elevation	206.4	205.7				ft msl	
pH	3.8	3.8				pH	
Sp. conductance	2000	2000				µS/cm	
Water temperature	21.0	19.0				°C	
Alkalinity as CaCO ₃	0	0				mg/L	
Turbidity	1	3				NTU	
Volumes purged	0.0	0.0				well volume	
Sampling code	XN	XN					
Synchronous water level	206.0 (09/10/97)	205.95 (12/15/97)				ft msl	
ANALYTICAL DATA							
<i>Inorganic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE	µg/L
Arsenic, total recoverable	<5.0	1				GE	µg/L
Barium, total recoverable	240	1				GE	µg/L
Cadmium, total recoverable	6.7	1		■		GE	µg/L
Chromium, total recoverable	<5.0	1				GE	µg/L
Cobalt, total recoverable	120	1		■		GE	µg/L
Copper, total recoverable	1.8	1	JE			GE	µg/L
Cyanide	<10	1				GE	µg/L
Lead, total recoverable	6.5	1	J			GE	µg/L
Mercury, total recoverable	0.13	1	JE			GE	µg/L
Nickel, total recoverable	48	1				GE	µg/L
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen	260,000	200	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE	µg/L
Silver, total recoverable	<5.0	1				GE	µg/L
Thallium, total recoverable	11	1		■		GE	µg/L
Vanadium, total recoverable	<5.0	1				GE	µg/L
Zinc, total recoverable	230	1	V			GE	µg/L
<i>Organic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE	µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE	µg/L
Dichloromethane	<5.0	1				GE	µg/L
Phenols	<5.0	1				GE	µg/L
Tetrachloroethylene	<2.0	1				GE	µg/L
Trichloroethylene	<2.0	1				GE	µg/L
Trichlorofluoromethane	<2.0	1				GE	µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 78C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>3.7E-01</i>	1	UI			GP							pCi/L
Cesium-137	<i>-1.9E+00</i>	1	UJI			GP							pCi/L
Cobalt-60	<i>1.5E-02</i>	1	UI			GP							pCi/L
Curium-242	<i>4.0E-02</i>	1	UI			GP							pCi/L
Curium-243/244	<i>3.4E-01</i>	1	UI			GP							pCi/L
Curium-245/246	<i>7.5E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>2.3E+02</i>	1		■		GP	2.3E+02	1		■		GP	pCi/L
Iodine-129	<i>1.2E+02</i>	1		■		GP							pCi/L
Nonvolatile beta	<i>1.4E+03</i>	1		■		GP	1.3E+03	1		■		GP	pCi/L
Plutonium-238	<i>5.1E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>-4.1E-02</i>	1	UI			GP							pCi/L
Radium-226	<i>4.5E+01</i>	1		■		GP							pCi/L
Radium-228	<i>3.1E+01</i>	1		■		GP							pCi/L
Strontium-90	<i>5.8E+02</i>	1		■		GP							pCi/L
Technetium-99	<i>2.4E+02</i>	1		■		GP							pCi/L
Thorium-228	<i>-6.9E-02</i>	1	UI			GP							pCi/L
Thorium-230	<i>8.8E-02</i>	1	UI			GP							pCi/L
Thorium-232	<i>-3.6E-02</i>	1	UI			GP							pCi/L
Total alpha emitters	<i>1.2E+02</i>			■									pCi/L
Total beta emitters	<i>9.7E+02</i>			■									pCi/L
Total radium (Ra-226 plus Ra-228)	<i>7.6E+01</i>			■									pCi/L
Tritium	<i>8.4E+03</i>	1		■		GP	8.6E+03	1		■		GP	pCi/mL
Uranium-233/234	<i>5.4E+01</i>	1		■		GP							pCi/L
Uranium-235	<i>3.9E+00</i>	1				GP							pCi/L
Uranium-238	<i>6.2E+01</i>	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB2)

SAMPLE DATE	07/08/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	201.0	202.3	ft msl
pH		3.0	pH
Sp. conductance		2040	µS/cm
Water temperature		20.0	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		2	NTU
Volumes purged		2.3	well volume
Sampling code	PN		
Synchronous water level	201.0 (09/10/97)	201.55 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable							
Arsenic, total recoverable							
Barium, total recoverable							
Cadmium, total recoverable							
Chromium, total recoverable							
Cobalt, total recoverable							
Copper, total recoverable							
Cyanide							
Lead, total recoverable							
Mercury, total recoverable							
Nickel, total recoverable							
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen							
Selenium, total recoverable							
Silver, total recoverable							
Thallium, total recoverable							
Vanadium, total recoverable							
Zinc, total recoverable							

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene							
Bis(2-ethylhexyl) phthalate							
Dichloromethane							
Phenols							
Tetrachloroethylene							
Trichloroethylene							
Trichlorofluoromethane							

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 79 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha							2.3E+03	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta							1.8E+03	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium							1.6E+04	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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)

<u>SAMPLE DATE</u>	07/09/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	157.5	157.5	ft msl
pH	6.0	5.9	pH
Sp. conductance	70	93	µS/cm
Water temperature	20.7	19.0	°C
Alkalinity as CaCO ₃	47	28	mg/L
Turbidity	0	2	NTU
Volumes purged	2.6	2.3	well volume
Sampling code			
Synchronous water level	157.4 (09/10/97)	157.8 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.35	1	JE			GE	0.28	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	1.6	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	270	1	V			GE	1,400	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 79A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>-4.0E-02</i>	1	UI			GP	<i>1.8E-01</i>	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	<i>1.6E+00</i>	1	UI			GP	<i>2.1E+00</i>	1				TM	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>8.0E+00</i>	1				GP	<i>8.3E+01</i>	1		■		TM	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/09/97	10/20/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	157.8	157.8	ft msl
pH	6.6	6.1	pH
Sp. conductance	140	175	µS/cm
Water temperature	20.4	19.8	°C
Alkalinity as CaCO ₃	81	65	mg/L
Turbidity	1	0	NTU
Volumes purged	3.0	2.3	well volume
Sampling code			
Synchronous water level	157.5 (09/10/97)	158.02 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	0.49	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,200	3	V			GE	2,300	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 79B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.3E+00	1				GP	9.3E-01	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	1.9E+00	1				GP	3.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.3E+01	1		■		GP	3.8E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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 (11B1)

SAMPLE DATE	07/08/97	10/09/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	196.0	195.8	ft msl
pH	3.4	3.4	pH
Sp. conductance	1020	1040	µS/cm
Water temperature	21.1	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	2.1	2.1	well volume
Sampling code			
Synchronous water level	195.6 (09/10/97)	196.6 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<50	5				GE	µg/L
Arsenic, total recoverable	<25	5				GE	µg/L
Barium, total recoverable	380	5	V			GE	µg/L
Cadmium, total recoverable	12	5	JE	■		GE	µg/L
Chromium, total recoverable	<25	5				GE	µg/L
Cobalt, total recoverable	96	5		■		GE	µg/L
Copper, total recoverable	46	5				GE	µg/L
Cyanide	<10	1				GE	µg/L
Lead, total recoverable	15	5	JE	■		GE	µg/L
Mercury, total recoverable	1.6	1				GE	µg/L
Nickel, total recoverable	350	5		■		GE	µg/L
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen	180,000	200		■		GE	µg/L
Selenium, total recoverable	<25	5				GE	µg/L
Silver, total recoverable	<25	5	V			GE	µg/L
Thallium, total recoverable	18	5	JE	■		GE	µg/L
Vanadium, total recoverable	<25	5				GE	µg/L
Zinc, total recoverable	86	5	V			GE	µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE	µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE	µg/L
Dichloromethane	<5.0	1				GE	µg/L
Phenols	<5.0	1				GE	µg/L
Tetrachloroethylene	<2.0	1				GE	µg/L
Trichloroethylene	<2.0	1				GE	µg/L
Trichlorofluoromethane	<2.0	1				GE	µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 79C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.6E+01	1		■		GP							pCi/L
Cesium-137	4.5E-01	1	UJI			GP							pCi/L
Cobalt-60	3.6E+00	1	UI			GP							pCi/L
Curium-242	-4.3E-01	1	UI			GP							pCi/L
Curium-243/244	1.7E+01	1		■		GP							pCi/L
Curium-245/246	1.1E+00	1	R4			GP							pCi/L
Gross alpha	2.0E+02	1		■		GP	7.0E+02	1		■		GP	pCi/L
Iodine-129	9.4E+01	1		■		GP							pCi/L
Nonvolatile beta	5.9E+02	1		■		GP	1.8E+03	1		■		GP	pCi/L
Plutonium-238	1.5E-01	1	UJI			GP							pCi/L
Plutonium-239/240	2.1E-02	1	UI			GP							pCi/L
Radium-226	4.8E+01	1	V	■		GP							pCi/L
Radium-228	3.5E+01	1		■		GP							pCi/L
Strontium-90	6.5E+02	1		■		GP							pCi/L
Technetium-99	1.4E+02	1	J	■		GP							pCi/L
Thorium-228	5.1E-01	1	UI			GP							pCi/L
Thorium-230	7.6E-01	1	UIV			GP							pCi/L
Thorium-232	3.8E-02	1	UI			GP							pCi/L
Total alpha emitters	5.0E+02			■									pCi/L
Total beta emitters	9.2E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	8.3E+01			■									pCi/L
Tritium	9.2E+03	1		■		GP	8.4E+03	1		■		GP	pCi/mL
Uranium-233/234	2.1E+02	1		■		GP							pCi/L
Uranium-235	1.7E+01	1		■		GP							pCi/L
Uranium-238	2.3E+02	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/08/97	10/24/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	153.3	153.3	ft msl
pH	6.4	6.1	pH
Sp. conductance	100	92	µS/cm
Water temperature	20.7	19.9	°C
Alkalinity as CaCO ₃	41	25	mg/L
Turbidity	1	0	NTU
Volumes purged	2.5	2.4	well volume
Sampling code			
Synchronous water level	153.2 (09/10/97)	153.8 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	0.24	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	160	1				GE	<90	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 87A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.5E+00	1				GP	1.2E+00	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	1.1E+00	1				GP	1.1E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.9E+00	1	V			GP	2.7E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/08/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	150.2	150.0	ft msl
pH	5.6	5.6	pH
Sp. conductance	100	95	µS/cm
Water temperature	20.6	21.0	°C
Alkalinity as CaCO ₃	15	7	mg/L
Turbidity	1	1	NTU
Volumes purged	3.4	3.2	well volume
Sampling code			
Synchronous water level	149.9 (09/10/97)	150.6 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable	2.9	1	JEV			GE							µg/L
Cadmium, total recoverable	0.24	1	JE			GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	5.8	5	JE			GE	1.0	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,900	5				GE	8,100	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 87B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	8.0E-01	1				GP	4.3E-01	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	4.0E+00	1				GP	3.6E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.1E+02	1	V	■		GP	1.2E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 87C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75591.9 E50093.4	33.274692 °N 81.681728 °W	159.3-148.8 ft msl	287.5 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/08/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	207.0	206.6	ft msl
pH	5.8	5.1	pH
Sp. conductance	96	89	µS/cm
Water temperature	20.9	21.5	°C
Alkalinity as CaCO ₃	17	1	mg/L
Turbidity	3	1	NTU
Volumes purged	0.0	2.4	well volume
Sampling code	XN		
Synchronous water level	206.8 (09/10/97)	206.9 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	50	1				GE	9.8	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,600	5				GE	6,200	10	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 87C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	9.4E-01	1				GP	1.4E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	4.6E+00	1				GP	4.4E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.7E+02	1	V	■		GP	3.9E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/08/97	10/20/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation			
pH	4.4	4.1	pH
Sp. conductance	64	67	µS/cm
Water temperature	21.4	20.1	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged			
Sampling code	S	S	
Synchronous water level	DS (12/15/97)	NS (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	1.7	1	JE			GE	1.5	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	3.8	1	JE			GE	3.9	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,200	3				GE	3,700	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 87D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.9E+01	1		■		GP	5.0E+01	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	2.6E+01	1				GP	3.1E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.7E+01	1	V			GP	1.4E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

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 (IIB1)

SAMPLE DATE	07/22/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	210.6	210.2	ft msl
pH	5.6	4.7	pH
Sp. conductance	46	45	µS/cm
Water temperature	21.0	19.5	°C
Alkalinity as CaCO ₃	2	9	mg/L
Turbidity	2	0	NTU
Volumes purged	3.1	2.5	well volume
Sampling code			
Synchronous water level	210.5 (09/10/97)	210.35 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<3.0	1	V			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	11	1				GE							µg/L
Cadmium, total recoverable	0.25	1	JE			GE	<5.0	1				GE	µg/L
Chromium, total recoverable	1.1	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	3.2	1	JE			GE							µg/L
Cyanide	9.0	1	JE			GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,500	1				GE	1,900	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.66	1	JE			GE							µg/L
Zinc, total recoverable	<14	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1	J1		●	GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1	J1		●	GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	1.9	1	JE1		●	GE							µg/L
Trichloroethylene	1.3	1	JE1		●	GE							µg/L
Trichlorofluoromethane	3.9	1	J1		●	GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 88C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	3.9E-02	1	UI			GP							pCi/L
Cesium-137	-2.4E-01	1	UJI			GP							pCi/L
Cobalt-60	4.1E-01	1	UI			GP							pCi/L
Curium-242	-7.1E-02	1	UI			GP							pCi/L
Curium-243/244	1.0E-01	1	UI			GP							pCi/L
Curium-245/246	8.5E-02	1	UI			GP							pCi/L
Gross alpha	1.1E-01	1	UI			GP	3.2E-01	1	UI			GP	pCi/L
Iodine-129	8.7E-01	1	UJI			GP							pCi/L
Nonvolatile beta	6.0E-01	1	UI			GP	6.3E-01	1	UI			GP	pCi/L
Plutonium-238	2.8E-01	1	UJI			GP							pCi/L
Plutonium-239/240	7.1E-02	1	UI			GP							pCi/L
Radium-226	4.5E-01	1	UI			GP							pCi/L
Radium-228	1.1E+00	1				GP							pCi/L
Strontium-90	4.0E-01	1	UI			GP							pCi/L
Technetium-99	-4.6E+00	1	UI			GP							pCi/L
Thorium-228	1.9E-01	1	UI			GP							pCi/L
Thorium-230	2.9E-01	1	UI			GP							pCi/L
Thorium-232	-1.8E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Total radium	1.1E+00												pCi/L
(Ra-226 plus Ra-228)	1.1E+00												
Tritium	1.7E+01	1				GP	2.0E+01	1		■		GP	pCi/L
Uranium-233/234	1.5E-01	1	UI			GP							pCi/mL
Uranium-235	1.0E-01	1	UI			GP							pCi/L
Uranium-238	1.3E-01	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 88D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 07/01/97 10/01/97

FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	214.2	213.8	ft msl
pH	3.6	3.6	pH
Sp. conductance	380	350	µS/cm
Water temperature	24.4	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	3	NTU
Volumes purged	2.6	2.9	well volume
Sampling code			
Synchronous water level	214.0 (09/10/97)	213.9 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1	J			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	77	1				GE							µg/L
Cadmium, total recoverable	1.2	1	JE			GE	1.6	1	JE			GE	µg/L
Chromium, total recoverable	4.0	1	JE			GE							µg/L
Cobalt, total recoverable	9.1	1		■		GE							µg/L
Copper, total recoverable	290	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	130	1		■		GE	23	1		■		GE	µg/L
Mercury, total recoverable	19	2		■		GE							µg/L
Nickel, total recoverable	23	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	46,000	40	V	■		GE	37,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	2.7	1	JE	■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	150	1				GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 88D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.6E+01	1	V	■		GP	pCi/L							
Cesium-137	<i>-1.4E+00</i>	1	UJI			GP	pCi/L							
Cobalt-60	2.2E+00	1	UI			GP	pCi/L							
Curium-242	<i>-2.0E-04</i>	1	UI			GP	pCi/L							
Curium-243/244	4.8E+01	1		■		GP	pCi/L							
Curium-245/246	5.5E-01	1				GP	pCi/L							
Gross alpha	4.1E+02	1		■		GP	pCi/L	5.6E+02	1		■		GP	pCi/L
Iodine-129	1.0E+02	1		■		GP	pCi/L							
Nonvolatile beta	4.6E+02	1	V	■		GP	pCi/L	5.0E+02	1		■		GP	pCi/L
Plutonium-238	<i>5.4E-02</i>	1	UJI			GP	pCi/L							
Plutonium-239/240	<i>2.4E-02</i>	1	UJI3			GP	pCi/L							
Radium-226	1.3E+00	1				GP	pCi/L							
Radium-228	1.2E+01	1		■		GP	pCi/L							
Strontium-90	2.2E+02	1		■		GP	pCi/L							
Technetium-99	6.6E+01	1	J	■		GP	pCi/L							
Thorium-228	<i>1.1E-01</i>	1	UI			GP	pCi/L							
Thorium-230	<i>9.9E-02</i>	1	UIV			GP	pCi/L							
Thorium-232	<i>6.2E-03</i>	1	UI			GP	pCi/L							
Total alpha emitters	3.9E+02			■			pCi/L							
Total beta emitters	4.0E+02			■			pCi/L							
Total radium (Ra-226 plus Ra-228)	1.4E+01			■			pCi/L							
Tritium	9.9E+02	1		■		GP	pCi/mL	9.2E+02	1		■		GP	pCi/mL
Uranium-233/234	1.4E+02	1		■		GP	pCi/L							
Uranium-235	1.4E+01	1				GP	pCi/L							
Uranium-238	1.7E+02	1	V	■		GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Bamwell (IIB1)

SAMPLE DATE	07/23/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	210.0	209.6	ft msl
pH	5.2	4.9	pH
Sp. conductance	50	53	µS/cm
Water temperature	20.3	19.6	°C
Alkalinity as CaCO ₃	7.0	13	mg/L
Turbidity	0.7	0	NTU
Volumes purged	3.0	2.4	well volume
Sampling code			
Synchronous water level	209.8 (09/10/97)	209.75 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	12	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	1.0	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.7	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,700	1	V			GE	1,800	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<14	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	1.0	1	JE			GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 89C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>2.8E-01</i>	1	UJI			GP							pCi/L
Cesium-137	<i>-2.5E-01</i>	1	UJI			GP							pCi/L
Cobalt-60	<i>4.9E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>-2.2E-02</i>	1	UI			GP							pCi/L
Curium-243/244	<i>1.4E-01</i>	1	UI			GP							pCi/L
Curium-245/246	<i>-5.9E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>4.5E-01</i>	1	UI			GP	<i>6.7E-01</i>	1	UI			GP	pCi/L
Iodine-129	<i>3.8E-01</i>	1	UI			GP							pCi/L
Nonvolatile beta	<i>1.5E+00</i>	1				GP	<i>1.1E+00</i>	1	UI			GP	pCi/L
Plutonium-238	<i>7.8E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>-6.4E-02</i>	1	UI			GP							pCi/L
Radium-226	<i>4.0E-01</i>	1	UI			GP							pCi/L
Radium-228	<i>3.3E-01</i>	1	UI			GP							pCi/L
Strontium-90	<i>5.1E-01</i>	1	UJI			GP							pCi/L
Technetium-99	<i>-2.2E+00</i>	1	UI			GP							pCi/L
Thorium-228	<i>-2.7E-02</i>	1	UI			GP							pCi/L
Thorium-230	<i>2.1E-01</i>	1	R4			GP							pCi/L
Thorium-232	<i>-2.4E-02</i>	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	<i>1.8E+01</i>	1				GP	<i>1.7E+01</i>	1				GP	pCi/mL
Uranium-233/234	<i>2.2E-01</i>	1	UI			GP							pCi/L
Uranium-235	<i>7.8E-02</i>	1	UI			GP							pCi/L
Uranium-238	<i>1.1E-01</i>	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/10/97	10/13/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	213.5	213.1	ft msl
pH	3.6	3.8	pH
Sp. conductance	400	260	µS/cm
Water temperature	23.2	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2.4	5	NTU
Volumes purged	2.6	4.9	well volume
Sampling code			
Synchronous water level	213.3 (09/10/97)	213.2 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	2.0	1	JE			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	62	1				GE							µg/L
Cadmium, total recoverable	5.5	1		■		GE	2.8	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	51	1		■		GE							µg/L
Copper, total recoverable	360	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	110	1		■		GE	5.5	1				GE	µg/L
Mercury, total recoverable	8.0	1		■		GE							µg/L
Nickel, total recoverable	10	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	43,000	20	V	■		GE	24,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	4.6	1	JE	■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	95	1				GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 89D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.3E+01	1	V			GP							pCi/L
Cesium-137	1.3E-01	1	UJI			GP							pCi/L
Cobalt-60	7.1E-01	1	UI			GP							pCi/L
Curium-242	-5.3E-03	1	UI			GP							pCi/L
Curium-243/244	9.4E+00	1				GP							pCi/L
Curium-245/246	4.1E-01	1				GP							pCi/L
Gross alpha	2.1E+02	1		■		GP	2.0E+02	1		■		GP	pCi/L
Iodine-129	2.0E+02	1		■		GP							pCi/L
Nonvolatile beta	9.5E+02	1	V	■		GP	5.5E+02	1		■		GP	pCi/L
Plutonium-238	5.5E-02	1	UJI			GP							pCi/L
Plutonium-239/240	-5.7E-03	1	UI			GP							pCi/L
Radium-226	8.9E+00	1		■		GP							pCi/L
Radium-228	5.1E+01	1		■		GP							pCi/L
Strontium-90	5.6E+02	1		■		GP							pCi/L
Technetium-99	7.8E+01	1	J	■		GP							pCi/L
Thorium-228	2.7E-01	1				GP							pCi/L
Thorium-230	6.4E-01	1	V			GP							pCi/L
Thorium-232	6.0E-03	1	UI			GP							pCi/L
Total alpha emitters	2.4E+02			■									pCi/L
Total beta emitters	8.9E+02			■									pCi/L
Total radium (Ra-226 plus Ra-228)	5.9E+01												pCi/L
Tritium	1.0E+03	1		■		GP	7.0E+02	1		■		GP	pCi/mL
Uranium-233/234	9.2E+01	1		■		GP							pCi/L
Uranium-235	8.9E+00	1				GP							pCi/L
Uranium-238	1.2E+02	1	V	■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Bamwell (IIB1)

SAMPLE DATE	07/22/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	217.7	208.4	ft msl
pH	6.0	5.3	pH
Sp. conductance	160	175	µS/cm
Water temperature	21.4	19.3	°C
Alkalinity as CaCO ₃	44	23	mg/L
Turbidity	2	1	NTU
Volumes purged	2.2	2.6	well volume
Sampling code			
Synchronous water level	208.5 (09/10/97)	208.5 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<1.9	1	V			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	40	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	1.9	1	JE			GE							µg/L
Cobalt, total recoverable	1.2	1	JE			GE							µg/L
Copper, total recoverable	2.5	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	0.98	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	3.1	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	13,000	10		■		GE	11,000	10	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.64	1	JE			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.65	1	JE			GE							µg/L
Zinc, total recoverable	<22	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	1.3	1	JE			GE							µg/L
Trichloroethylene	1.5	1	JE			GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 90C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.0E-01	1	UI			GP	pCi/L							
Cesium-137	-1.6E+00	1	UJI			GP	pCi/L							
Cobalt-60	5.2E+00	1	R4			GP	pCi/L							
Curium-242	6.3E-03	1	UI			GP	pCi/L							
Curium-243/244	-5.3E-02	1	UI			GP	pCi/L							
Curium-245/246	1.1E-01	1	UI			GP	pCi/L							
Gross alpha	2.1E+00	1				GP	pCi/L	3.8E+00	1				GP	pCi/L
Iodine-129	1.2E+00	1	UJI			GP	pCi/L							
Nonvolatile beta	1.6E+01	1				GP	pCi/L	1.8E+01	1				GP	pCi/L
Plutonium-238	3.2E-01	1	UJI			GP	pCi/L							
Plutonium-239/240	3.7E-02	1	UI			GP	pCi/L							
Radium-226	1.0E+00	1				GP	pCi/L							
Radium-228	9.5E-01	1				GP	pCi/L							
Strontium-90	6.1E+00	1				GP	pCi/L							
Technetium-99	1.6E+01	1				GP	pCi/L							
Thorium-228	3.2E-02	1	UI			GP	pCi/L							
Thorium-230	9.8E-02	1	UI			GP	pCi/L							
Thorium-232	-1.6E-02	1	UI			GP	pCi/L							
Total alpha emitters														
Total beta emitters	2.3E+01						pCi/L							
Total radium														
(Ra-226 plus Ra-228)	2.0E+00													
Tritium	4.5E+02	1		■		GP	pCi/mL	4.4E+02	1		■		GP	pCi/mL
Uranium-233/234	1.9E-01	1	UI			GP	pCi/L							
Uranium-235	5.6E-02	1	UI			GP	pCi/L							
Uranium-238	4.6E-02	1	UI			GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 90D

<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>
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	07/02/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation			
pH	3.2	3.4	pH
Sp. conductance	1000	1020	µS/cm
Water temperature	21.4	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	6	12.7	NTU
Volumes purged			
Sampling code	NSX	NSX	
Synchronous water level	DS (09/10/97)	DS (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	12	1				GE							µg/L
Barium, total recoverable	210	1	V			GE							µg/L
Cadmium, total recoverable	4.5	1	JE			GE	7.7	1		■		GE	µg/L
Chromium, total recoverable	5.9	1				GE							µg/L
Cobalt, total recoverable	13	1		■		GE							µg/L
Copper, total recoverable	790	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	220	1		■		GE	270	1		■		GE	µg/L
Mercury, total recoverable	6.0	1		■		GE							µg/L
Nickel, total recoverable	25	1	J			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	140,000	80	V	■		GE	120,000	120		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	5.2	1		■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	300	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	1.4	1	JE			GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 90D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.8E+01	1		■		GP	pCi/L
Cesium-137	-1.7E-02	1	UJI			GP	pCi/L
Cobalt-60	4.8E+00	1				GP	pCi/L
Curium-242	4.3E-01	1	UI			GP	pCi/L
Curium-243/244	2.6E+01	1		■		GP	pCi/L
Curium-245/246	1.3E+00	1	R4			GP	pCi/L
Gross alpha	5.8E+02	1		■		GP	pCi/L
Iodine-129	2.4E+02	1		■		GP	pCi/L
Nonvolatile beta	1.3E+03	1	V	■		GP	pCi/L
Plutonium-238	8.2E-02	1	UJI			GP	pCi/L
Plutonium-239/240	-4.9E-02	1	UI			GP	pCi/L
Radium-226	3.1E+01	1	V	■		GP	pCi/L
Radium-228	7.2E+01	1		■		GP	pCi/L
Strontium-90	6.4E+02	1		■		GP	pCi/L
Technetium-99	1.2E+02	1	J	■		GP	pCi/L
Thorium-228	1.1E+00	1				GP	pCi/L
Thorium-230	1.1E+00	1	UIV			GP	pCi/L
Thorium-232	5.0E-02	1	UI			GP	pCi/L
Total alpha emitters	7.2E+02			■			pCi/L
Total beta emitters	1.1E+03			■			pCi/L
Total radium							pCi/L
(Ra-226 plus Ra-228)	1.0E+02			■			pCi/L
Tritium	8.3E+03	1		■		GP	pCi/mL
Uranium-233/234	3.0E+02	1		■		GP	pCi/L
Uranium-235	2.6E+01	1		■		GP	pCi/L
Uranium-238	3.4E+02	1		■		GP	pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 91C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75213.3 E50953.5	33.275259 °N 81.678728 °W	159.1-149.1 ft msl	279.3 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/08/97	10/01/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	208.9	208.7	ft msl
pH	4.6	4.8	pH
Sp. conductance	140	160	µS/cm
Water temperature	22.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	10	6	NTU
Volumes purged	0.025	2.1	well volume
Sampling code	XN		
Synchronous water level	208.7 (09/10/97)	208.68 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	57	1	V			GE							µg/L
Cadmium, total recoverable	3.4	1	JE			GE	2.7	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	3.6	1	JE	■		GE							µg/L
Copper, total recoverable	4.0	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	3.3	1	JE			GE	0.71	1	JE			GE	µg/L
Mercury, total recoverable	0.31	1				GE							µg/L
Nickel, total recoverable	2.5	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	15,000	20		■		GE	14,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	32	10	JEV			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 91C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	7.3E-02	1	UI			GP	pCi/L							
Cesium-137	1.1E+00	1	UJI			GP	pCi/L							
Cobalt-60	-1.3E-01	1	UI			GP	pCi/L							
Curium-242	-8.7E-03	1	UI			GP	pCi/L							
Curium-243/244	4.0E-02	1	UI			GP	pCi/L							
Curium-245/246	0.0E+00	1	UI			GP	pCi/L							
Gross alpha	4.3E+01	1		■		GP	pCi/L	3.8E+01	1		■		GP	pCi/L
Iodine-129	1.5E+01	1				GP	pCi/L							
Nonvolatile beta	2.5E+02	1		■		GP	pCi/L	2.9E+02	1		■		GP	pCi/L
Plutonium-238	1.5E-01	1	UI			GP	pCi/L							
Plutonium-239/240	3.8E-03	1	UI			GP	pCi/L							
Radium-226	7.2E+00	1		■		GP	pCi/L							
Radium-228	1.2E+01	1	V	■		GP	pCi/L							
Strontium-90	1.4E+02	1	J	■		GP	pCi/L							
Technetium-99	2.1E+01	1				GP	pCi/L							
Thorium-228	8.2E-02	1	UI			GP	pCi/L							
Thorium-230	3.5E-01	1	URIV4			GP	pCi/L							
Thorium-232	1.3E-02	1	UI			GP	pCi/L							
Total alpha emitters	2.9E+00						pCi/L							
Total beta emitters	1.8E+02			■			pCi/L							
Total radium														
(Ra-226 plus Ra-228)	1.9E+01			■			pCi/L							
Tritium	3.7E+02	1		■		GP	pCi/mL	3.5E+02	1		■		GP	pCi/mL
Uranium-233/234	1.5E+00	1				GP	pCi/L							
Uranium-235	2.7E-02	1	UI			GP	pCi/L							
Uranium-238	1.4E+00	1				GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 91D

<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>
N75207.6 E50946.6	33.275235 °N 81.678735 °W	220.9-200.9 ft msl	279.2 ft msl	4" PVC	V	Water Table (IIB2)

<u>SAMPLE DATE</u>	07/08/97	10/01/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	211.4	211.0	ft msl
pH	3.8	3.6	pH
Sp. conductance	120	160	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	0	5	NTU
Volumes purged	11	3.3	well volume
Sampling code			
Synchronous water level	211.2 (09/10/97)	211.0 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	35	1	V			GE							µg/L
Cadmium, total recoverable	0.88	1	JE			GE	0.35	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	0.72	1	JE			GE							µg/L
Copper, total recoverable	7.3	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.7	1	JE			GE	1.2	1	JE			GE	µg/L
Mercury, total recoverable	0.74	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	12,000	20		■		GE	10,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	4.0	1	JEV	■		GE							µg/L
Zinc, total recoverable	16	2	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 91D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.5E+00	1				GP							pCi/L
Cesium-137	<i>-8.7E-01</i>	1	UJI			GP							pCi/L
Cobalt-60	<i>8.6E-01</i>	1	UI			GP							pCi/L
Curium-242	2.3E-02	1	UI			GP							pCi/L
Curium-243/244	1.2E+00	1				GP							pCi/L
Curium-245/246	<i>2.5E-02</i>	1	UI			GP							pCi/L
Gross alpha	1.1E+02	1		■		GP	1.1E+02	1		■		GP	pCi/L
Iodine-129	1.8E+01	1				GP							pCi/L
Nonvolatile beta	6.7E+01	1		■		GP	7.0E+01	1		■		GP	pCi/L
Plutonium-238	<i>4.8E-02</i>	1	UI			GP							pCi/L
Plutonium-239/240	<i>1.2E-02</i>	1	UI			GP							pCi/L
Radium-226	2.8E+00	1				GP							pCi/L
Radium-228	9.6E+00	1	V	■		GP							pCi/L
Strontium-90	2.8E+01	1	J	■		GP							pCi/L
Technetium-99	1.0E+01	1				GP							pCi/L
Thorium-228	<i>8.4E-02</i>	1	UI			GP							pCi/L
Thorium-230	<i>2.7E-01</i>	1	RUIV4			GP							pCi/L
Thorium-232	<i>1.8E-02</i>	1	UI			GP							pCi/L
Total alpha emitters	1.1E+02			■									pCi/L
Total beta emitters	6.6E+01			■									pCi/L
Total radium (Ra-226 plus Ra-228)	1.2E+01			■									pCi/L
Tritium	3.1E+02	1		■		GP	2.7E+02	1		■		GP	pCi/mL
Uranium-233/234	4.1E+01	1		■		GP							pCi/L
Uranium-235	3.3E+00	1				GP							pCi/L
Uranium-238	6.0E+01	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 92C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75053.2 E50564.0	33.274269 °N 81.679442 °W	157.6-147.6 ft msl	275.7 ft msl	4" PVC	V	Barnwell (IIB1)

SAMPLE DATE	07/09/97	10/06/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	186.8	207.5	ft msl
pH	4.6	4.2	pH
Sp. conductance	320	300	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	1	NTU
Volumes purged	2.7	2.4	well volume
Sampling code			
Synchronous water level	207.5 (09/10/97)	207.5 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1	J3			GE							µg/L
Arsenic, total recoverable	<5.0	1	J3			GE							µg/L
Barium, total recoverable	97	5	JV3			GE							µg/L
Cadmium, total recoverable	4.9	5	JE			GE	4.9	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1	J3			GE							µg/L
Cobalt, total recoverable	33	5	J3	■		GE							µg/L
Copper, total recoverable	<5.0	1	J3			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1	J3			GE	1.4	1	JE			GE	µg/L
Mercury, total recoverable	0.26	1				GE							µg/L
Nickel, total recoverable	8.0	1	J3			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	41,000	40	V	■		GE	34,000	20		■		GE	µg/L
Selenium, total recoverable	7.6	5	JE			GE							µg/L
Silver, total recoverable	5.6	5	JEV			GE							µg/L
Thallium, total recoverable	16	5	JE	■		GE							µg/L
Vanadium, total recoverable	<5.0	1	J3			GE							µg/L
Zinc, total recoverable	52	5	JV3			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	24	1		■		GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	4.5	1	JE	■		GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 92C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	8.5E-02	1	UI			GP							pCi/L
Cesium-137	3.0E+00	1	UJI			GP							pCi/L
Cobalt-60	2.5E+00	1	UI			GP							pCi/L
Curium-242	1.1E-02	1	UI			GP							pCi/L
Curium-243/244	4.5E-02	1	UI			GP							pCi/L
Curium-245/246	1.2E-02	1	UI			GP							pCi/L
Gross alpha	4.2E+01	1		■		GP	5.2E+01	1		■		GP	pCi/L
Iodine-129	1.6E+01	1	J			GP							pCi/L
Nonvolatile beta	2.4E+02	1		■		GP	2.8E+02	1		■		GP	pCi/L
Plutonium-238	1.1E-03	1	UI			GP							pCi/L
Plutonium-239/240	6.9E-03	1	UI			GP							pCi/L
Radium-226	1.1E+01	1		■		GP							pCi/L
Radium-228	8.1E+00	1	V	■		GP							pCi/L
Strontium-90	1.7E+02	1	J	■		GP							pCi/L
Technetium-99	5.4E+01	1		■		GP							pCi/L
Thorium-228	1.0E-01	1	UI			GP							pCi/L
Thorium-230	7.4E-01	1	RV4			GP							pCi/L
Thorium-232	5.1E-02	1	UI			GP							pCi/L
Total alpha emitters	2.4E+00												pCi/L
Total beta emitters	2.5E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.9E+01			■									pCi/L
Tritium	1.1E+03	1		■		GP	9.7E+02	1		■		GP	pCi/mL
Uranium-233/234	1.3E+00	1				GP							pCi/L
Uranium-235	4.6E-02	1	UI			GP							pCi/L
Uranium-238	1.1E+00	1				GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 81.679445 °W	221.7-201.7 ft msl	275.9 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/02/97	10/06/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	209.9	209.5	ft msl
pH	3.2	3.4	pH
Sp. conductance	780	800	µS/cm
Water temperature	23.3	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	3	NTU
Volumes purged	2.8	3.7	well volume
Sampling code			
Synchronous water level	209.7 (09/10/97)	209.31 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE	µg/L							
Arsenic, total recoverable	6.8	1				GE	µg/L							
Barium, total recoverable	180	1	V			GE	µg/L							
Cadmium, total recoverable	7.2	1	J	■		GE	µg/L	13	1		■		GE	µg/L
Chromium, total recoverable	2.4	1	JE			GE	µg/L							
Cobalt, total recoverable	6.6	1		■		GE	µg/L							
Copper, total recoverable	36	1				GE	µg/L							
Cyanide	<10	1				GE	µg/L							
Lead, total recoverable	25	1		■		GE	µg/L	400	1		■		GE	µg/L
Mercury, total recoverable	0.52	1				GE	µg/L							
Nickel, total recoverable	14	1	J			GE	µg/L							
Nitrate as nitrogen														
Nitrate-nitrite as nitrogen	100,000	80	V	■		GE	µg/L	84,000	120		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE	µg/L							
Silver, total recoverable	<5.0	1				GE	µg/L							
Thallium, total recoverable	4.8	1	JE	■		GE	µg/L							
Vanadium, total recoverable	<5.0	1				GE	µg/L							
Zinc, total recoverable	49	1	V			GE	µg/L							

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE	µg/L							
Bis(2-ethylhexyl) phthalate	<10	1				GE	µg/L							
Dichloromethane	<5.0	1				GE	µg/L							
Phenols	<5.0	1	J			GE	µg/L							
Tetrachloroethylene	<2.0	1				GE	µg/L							
Trichloroethylene	<2.0	1				GE	µg/L							
Trichlorofluoromethane	<2.0	1				GE	µg/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 92D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.4E+01	1		■		GP							pCi/L
Cesium-137	2.3E+00	1	UJI			GP							pCi/L
Cobalt-60	1.7E+00	1	UI			GP							pCi/L
Curium-242	2.1E-01	1	UI			GP							pCi/L
Curium-243/244	1.5E+01	1				GP							pCi/L
Curium-245/246	1.0E+00	1	R4			GP							pCi/L
Gross alpha	4.1E+02	1		■		GP	2.1E+02	1		■		GP	pCi/L
Iodine-129	7.9E+01	1		■		GP							pCi/L
Nonvolatile beta	9.4E+02	1	V	■		GP	5.3E+02	1		■		GP	pCi/L
Plutonium-238	5.4E-02	1	UJI			GP							pCi/L
Plutonium-239/240	5.2E-03	1	UI			GP							pCi/L
Radium-226	3.1E+01	1	V	■		GP							pCi/L
Radium-228	3.5E+01	1		■		GP							pCi/L
Strontium-90	4.7E+02	1		■		GP							pCi/L
Technetium-99	7.0E+01	1	J	■		GP							pCi/L
Thorium-228	8.9E-01	1				GP							pCi/L
Thorium-230	8.8E-01	1	UIV			GP							pCi/L
Thorium-232	3.4E-02	1	UI			GP							pCi/L
Total alpha emitters	5.2E+02			■									pCi/L
Total beta emitters	6.6E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	6.7E+01			■									pCi/L
Tritium	3.0E+03	1		■		GP	2.8E+03	1		■		GP	pCi/mL
Uranium-233/234	2.1E+02	1		■		GP							pCi/L
Uranium-235	1.9E+01	1		■		GP							pCi/L
Uranium-238	2.6E+02	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB1)

SAMPLE DATE	07/22/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	207.1	206.7	ft msl
pH	4.6	4.5	pH
Sp. conductance	28	300	µS/cm
Water temperature	20.9	20.3	°C
Alkalinity as CaCO ₃	0	1	mg/L
Turbidity	1	0	NTU
Volumes purged	2.8	2.3	well volume
Sampling code			
Synchronous water level	206.8 (09/10/97)	206.85 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	60	1				GE							µg/L
Cadmium, total recoverable	0.74	1	JE			GE	0.97	1	JE			GE	µg/L
Chromium, total recoverable	1.3	1	JE			GE							µg/L
Cobalt, total recoverable	3.3	1	JE	■		GE							µg/L
Copper, total recoverable	6.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.3	1	JE			GE	1.7	1	JE			GE	µg/L
Mercury, total recoverable	0.15	1	JE			GE							µg/L
Nickel, total recoverable	8.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	35,000	25		■		GE	34,000	40	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	1.2	1	JE			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.74	1	JE			GE							µg/L
Zinc, total recoverable	120	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<11	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	2.4	1				GE							µg/L
Trichlorofluoromethane	1.3	1	JE			GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 93C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>1.3E-01</i>	1	UI			GP							pCi/L
Cesium-137	<i>1.6E+00</i>	1	UJI			GP							pCi/L
Cobalt-60	<i>-4.7E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>-4.5E-02</i>	1	UI			GP							pCi/L
Curium-243/244	<i>1.8E-01</i>	1	UI			GP							pCi/L
Curium-245/246	<i>6.1E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>5.0E+00</i>	1				GP	7.7E+00	1				GP	pCi/L
Iodine-129	<i>7.0E+00</i>	1				GP							pCi/L
Nonvolatile beta	<i>4.3E+01</i>	1				GP	5.6E+01	1		■		GP	pCi/L
Plutonium-238	<i>4.5E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>-1.8E-02</i>	1	UI			GP							pCi/L
Radium-226	<i>2.2E+00</i>	1				GP							pCi/L
Radium-228	<i>1.6E+00</i>	1				GP							pCi/L
Strontium-90	<i>1.5E+01</i>	1		■		GP							pCi/L
Technetium-99	<i>4.1E+01</i>	1				GP							pCi/L
Thorium-228	<i>-2.2E-01</i>	1	UI			GP							pCi/L
Thorium-230	<i>2.1E-01</i>	1	UI			GP							pCi/L
Thorium-232	<i>-1.3E-02</i>	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	<i>6.4E+01</i>			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	<i>3.8E+00</i>												
Tritium	<i>1.0E+03</i>	1		■		GP	1.1E+03	1		■		GP	pCi/L
Uranium-233/234	<i>1.8E-01</i>	1	UI			GP							pCi/mL
Uranium-235	<i>-2.8E-02</i>	1	UI			GP							pCi/L
Uranium-238	<i>1.5E-02</i>	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 93D

<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>	
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		07/10/97		10/14/97			
FIELD DATA							
<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>			<u>Unit</u>		
Water elevation	208.6	208.3			ft msl		
pH		3.4			pH		
Sp. conductance		1040			µS/cm		
Water temperature		20.0			°C		
Alkalinity as CaCO ₃		0			mg/L		
Turbidity		8			NTU		
Volumes purged		0.0			well volume		
Sampling code	PN	XN					
Synchronous water level		208.15 (12/15/97)			ft msl		
ANALYTICAL DATA							
<i>Inorganic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable							
Arsenic, total recoverable							
Barium, total recoverable							
Cadmium, total recoverable							
Chromium, total recoverable							
Cobalt, total recoverable							
Copper, total recoverable							
Cyanide							
Lead, total recoverable							
Mercury, total recoverable							
Nickel, total recoverable							
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen							
Selenium, total recoverable							
Silver, total recoverable							
Thallium, total recoverable							
Vanadium, total recoverable							
Zinc, total recoverable							
<i>Organic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene							
Bis(2-ethylhexyl) phthalate							
Dichloromethane							
Phenols							
Tetrachloroethylene							
Trichloroethylene							
Trichlorofluoromethane							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 93D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha							2.1E+02	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta							1.6E+03	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium							3.2E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Bamwell (IIB1)

SAMPLE DATE	07/10/97	10/07/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	206.2	205.6	ft msl
pH	3.8	4.0	pH
Sp. conductance	2000	2000	µS/cm
Water temperature	23.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	5	10	NTU
Volumes purged	0.023	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	205.8 (09/10/97)	205.8 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	91	1	V			GE							µg/L
Cadmium, total recoverable	3.5	1	JE			GE	11	1		■		GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	93	1		■		GE							µg/L
Copper, total recoverable	1.5	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	2.6	1	JE			GE	23	1		■		GE	µg/L
Mercury, total recoverable	<0.20	1	J			GE							µg/L
Nickel, total recoverable	25	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	240,000	400	V	■		GE	270,000	200		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<0.67	1	V			GE							µg/L
Thallium, total recoverable	11	1		■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	47	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	3.7	1	JE	■		GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 94C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.6E-02	1	UI			GP							pCi/L
Cesium-137	5.6E+00	1	R4			GP							pCi/L
Cobalt-60	4.3E+00	1				GP							pCi/L
Curium-242	4.4E-01	1	UI			GP							pCi/L
Curium-243/244	1.5E-01	1	UI			GP							pCi/L
Curium-245/246	2.6E-01	1	UI			GP							pCi/L
Gross alpha	1.2E+02	1		■		GP	2.3E+02	1		■		GP	pCi/L
Iodine-129	1.1E+02	1		■		GP							pCi/L
Nonvolatile beta	2.2E+03	1		■		GP	2.3E+03	1		■		GP	pCi/L
Plutonium-238	3.7E-01	1	UJI			GP							pCi/L
Plutonium-239/240	2.0E-01	1	UI			GP							pCi/L
Radium-226	2.0E+01	1		■		GP							pCi/L
Radium-228	2.6E+01	1		■		GP							pCi/L
Strontium-90	6.2E+02	1		■		GP							pCi/L
Technetium-99	2.2E+02	1		■		GP							pCi/L
Thorium-228	1.0E+00	1	UI			GP							pCi/L
Thorium-230	7.1E-01	1	R4			GP							pCi/L
Thorium-232	2.8E-02	1	UI			GP							pCi/L
Total alpha emitters	4.9E+01			■									pCi/L
Total beta emitters	9.8E+02			■									pCi/L
Total radium (Ra-226 plus Ra-228)	4.6E+01			■									pCi/L
Tritium	1.0E+04	1		■		GP	1.1E+04	1		■		GP	pCi/mL
Uranium-233/234	2.4E+01	1		■		GP							pCi/L
Uranium-235	1.3E+00	1				GP							pCi/L
Uranium-238	2.4E+01	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/02/97	10/06/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	207.8	207.5	ft msl
pH	3.2	3.4	pH
Sp. conductance	740	800	µS/cm
Water temperature	21.4	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	18	14	well volume
Sampling code			
Synchronous water level	207.7 (09/10/97)	207.32 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	370	1	V			GE							µg/L
Cadmium, total recoverable	3.3	1	JE			GE	3.9	1	JE			GE	µg/L
Chromium, total recoverable	1.5	1	JE			GE							µg/L
Cobalt, total recoverable	20	1		■		GE							µg/L
Copper, total recoverable	35	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	1.0	1	JE			GE	µg/L
Mercury, total recoverable	0.41	1				GE							µg/L
Nickel, total recoverable	14	1	J			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	82,000	40	V	■		GE	76,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.67	1	JE			GE							µg/L
Thallium, total recoverable	3.7	1	JE	■		GE							µg/L
Vanadium, total recoverable	0.69	1	JE			GE							µg/L
Zinc, total recoverable	40	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	5.1	1		■		GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 94DR (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.8E+01	1		■		GP							pCi/L
Cesium-137	8.0E+01	1	J	■		GP							pCi/L
Cobalt-60	2.4E+00	1	UI			GP							pCi/L
Curium-242	7.6E-02	1	UI			GP							pCi/L
Curium-243/244	4.9E+01	1		■		GP							pCi/L
Curium-245/246	4.7E-01	1	R4			GP							pCi/L
Gross alpha	6.6E+02	1		■		GP	3.6E+02	1		■		GP	pCi/L
Iodine-129	6.3E+01	1		■		GP							pCi/L
Nonvolatile beta	7.2E+02	1	V	■		GP	4.6E+02	1		■		GP	pCi/L
Plutonium-238	2.9E-02	1	UJI			GP							pCi/L
Plutonium-239/240	1.8E-02	1	UI			GP							pCi/L
Radium-226	4.5E+00	1	V			GP							pCi/L
Radium-228	5.4E+01	1		■		GP							pCi/L
Strontium-90	2.0E+02	1		■		GP							pCi/L
Technetium-99	4.8E+01	1	J			GP							pCi/L
Thorium-228	4.9E-01	1	UI			GP							pCi/L
Thorium-230	7.7E-01	1	UIV			GP							pCi/L
Thorium-232	4.0E-02	1	UI			GP							pCi/L
Total alpha emitters	1.0E+03			■									pCi/L
Total beta emitters	4.5E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	5.9E+01			■									pCi/L
Tritium	3.2E+03	1		■		GP	3.5E+03	1		■		GP	pCi/mL
Uranium-233/234	2.8E+02	1		■		GP							pCi/L
Uranium-235	3.3E+01	1		■		GP							pCi/L
Uranium-238	6.2E+02	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB1)

SAMPLE DATE	07/09/97	10/06/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	205.5	205.2	ft msl
pH	3.6	3.4	pH
Sp. conductance	2000	2000	µS/cm
Water temperature	22.9	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	4	NTU
Volumes purged	3.2	5.5	well volume
Sampling code			
Synchronous water level	205.2 (09/10/97)	205.1 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	830	1	Y			WA							µg/L
Cadmium, total recoverable	15	1	Y	■		WA	11	1		■		GE	µg/L
Chromium, total recoverable	0.99	1	JEY			WA							µg/L
Cobalt, total recoverable	380	1	VY	■		WA							µg/L
Copper, total recoverable	41	1	Y			WA							µg/L
Cyanide	6.6	1	JE			GE							µg/L
Lead, total recoverable	7.0	1	JEY			WA	1.5	1	JE			GE	µg/L
Mercury, total recoverable	2.0	1				GE							µg/L
Nickel, total recoverable	85	1	Y			WA							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	400,000	1000	VY	■		WA	250,000	200		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.98	1	JE			GE							µg/L
Thallium, total recoverable	13	1		■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	260	1	Y			WA							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<1.9	1	VY			WA							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	4.8	1	JE	■		GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 95CR (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.6E+01	1		■		GP	pCi/L							
Cesium-137	7.3E+00	1				TM	pCi/L							
Cobalt-60	5.8E+00	1	J2			TM	pCi/L							
Curium-242	6.2E-01	1	J1			TM	pCi/L							
Curium-243/244	2.7E+01	1		■		GP	pCi/L							
Curium-245/246	3.6E-02	1	UI			GP	pCi/L							
Gross alpha	1.2E+03	1		■		GP	pCi/L	1.4E+03	1		■		GP	pCi/L
Iodine-129	1.4E+02	1	J	■		TM	pCi/L							
Nonvolatile beta	2.8E+03	1		■		TM	pCi/L	2.4E+03	1		■		GP	pCi/L
Plutonium-238	0.0E+00	1	UI			TM	pCi/L							
Plutonium-239/240	-3.2E-02	1	UI			GP	pCi/L							
Radium-226	1.5E+02	1		■		TM	pCi/L							
Radium-228	6.0E+02	1	V	■		TM	pCi/L							
Strontium-90	9.3E+02	1		■		GP	pCi/L							
Technetium-99	3.4E+03	1		■		TM	pCi/L							
Thorium-228	2.8E-01	1	UI			GP	pCi/L							
Thorium-230	1.0E-02	1	UI			GP	pCi/L							
Thorium-232	0.0E+00	1	UI			TM	pCi/L							
Total alpha emitters	1.4E+03			■			pCi/L							
Total beta emitters	5.1E+03			■			pCi/L							
Total radium														
(Ra-226 plus Ra-228)	7.5E+02			■			pCi/L							
Tritium	9.9E+03	1		■		TM	pCi/mL	9.4E+03	1		■		GP	pCi/mL
Uranium-233/234	4.1E+02	1		■		GP	pCi/L							
Uranium-235	5.2E+02	1	J	■		TM	pCi/L							
Uranium-238	4.9E+02	1		■		TM	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/09/97	10/06/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	212.3	207.6	ft msl
pH	3.2	3.2	pH
Sp. conductance	1020	1000	µS/cm
Water temperature	21.6	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	4.3	5.1	well volume
Sampling code			
Synchronous water level	207.8 (09/10/97)	207.3 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	280	1				GE							µg/L
Cadmium, total recoverable	<1.1	1	V			GE	2.2	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	17	1		■		GE							µg/L
Copper, total recoverable	32	1	V			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	15	1	V			GE	10	1				GE	µg/L
Mercury, total recoverable	0.50	1				GE							µg/L
Nickel, total recoverable	<16	1	V			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	120,000	120	V	■		GE	110,000	120		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	7.5	1		■		GE							µg/L
Vanadium, total recoverable	1.1	1	JE			GE							µg/L
Zinc, total recoverable	60	1				GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	4.1	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 95DR (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	3.6E+01	1		■		GP	pCi/L							
Cesium-137	3.2E+02	1	J	■		GP	pCi/L							
Cobalt-60	1.8E+00	1	UI			GP	pCi/L							
Curium-242	2.9E-01	1	UI			GP	pCi/L							
Curium-243/244	3.2E+01	1		■		GP	pCi/L							
Curium-245/246	1.0E+00	1	UI			GP	pCi/L							
Gross alpha	1.3E+03	1		■		GP	pCi/L	1.2E+03	1		■		GP	pCi/L
Iodine-129	2.7E+02	1		■		GP	pCi/L							
Nonvolatile beta	1.0E+03	1		■		GP	pCi/L	9.2E+02	1		■		GP	pCi/L
Plutonium-238	8.8E-02	1	UJI			GP	pCi/L							
Plutonium-239/240	1.6E-01	1	UI			GP	pCi/L							
Radium-226	3.7E+00	1	V			GP	pCi/L							
Radium-228	6.3E+01	1	V	■		GP	pCi/L							
Strontium-90	5.3E+01	1		■		GP	pCi/L							
Technetium-99	5.5E+01	1		■		GP	pCi/L							
Thorium-228	4.1E-01	1	UI			GP	pCi/L							
Thorium-230	2.3E-01	1	UI			GP	pCi/L							
Thorium-232	-1.1E-03	1	UI			GP	pCi/L							
Total alpha emitters	1.2E+03			■			pCi/L							
Total beta emitters	7.5E+02			■			pCi/L							
Total radium														
(Ra-226 plus Ra-228)	6.7E+01			■			pCi/L							
Tritium	4.9E+03	1		■		GP	pCi/mL	4.6E+03	1		■		GP	pCi/mL
Uranium-233/234	2.7E+02	1		■		GP	pCi/L							
Uranium-235	3.5E+01	1		■		GP	pCi/L							
Uranium-238	8.0E+02	1		■		GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/22/97	10/21/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	152.5	152.5	ft msl
pH	6.6	6.7	pH
Sp. conductance	160	185	µS/cm
Water temperature	21.6	20.8	°C
Alkalinity as CaCO ₃	81	81	mg/L
Turbidity	0.5	1	NTU
Volumes purged	3.0	2.3	well volume
Sampling code			
Synchronous water level	152.3 (09/11/97)	152.8 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	44	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	0.34	1	JE			GE	µg/L
Chromium, total recoverable	2.2	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.4	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.2	1	JE			GE	1.4	1	JE			GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,200	1				GE	1,000	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.48	1	JE			GE							µg/L
Zinc, total recoverable	<3.7	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 96AR (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>-1.7E-01</i>	1	UI			GP							pCi/L
Cesium-137	<i>6.0E-01</i>	1	UJI			GP							pCi/L
Cobalt-60	<i>2.0E+00</i>	1	UI			GP							pCi/L
Curium-242	<i>3.5E-02</i>	1	UI			GP							pCi/L
Curium-243/244	<i>1.6E-01</i>	1	UI			GP							pCi/L
Curium-245/246	<i>-3.7E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>1.3E+00</i>	1				GP	1.5E+00	1				GP	pCi/L
Iodine-129	<i>1.3E+00</i>	1	R4			GP							pCi/L
Nonvolatile beta	<i>5.3E-01</i>	1	UI			GP	2.0E+00	1				GP	pCi/L
Plutonium-238	<i>4.0E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>9.1E-02</i>	1	UI			GP							pCi/L
Radium-226	<i>5.9E-01</i>	1				GP							pCi/L
Radium-228	<i>1.2E+00</i>	1				GP							pCi/L
Strontium-90	<i>2.0E-01</i>	1	UI			GP							pCi/L
Technetium-99	<i>-4.0E+00</i>	1	UI			GP							pCi/L
Thorium-228	<i>-1.6E-01</i>	1	UI			GP							pCi/L
Thorium-230	<i>1.8E-01</i>	1	UI			GP							pCi/L
Thorium-232	<i>5.0E-02</i>	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	<i>1.2E+00</i>												pCi/L
Total radium													
(Ra-226 plus Ra-228)	<i>1.8E+00</i>												
Tritium	<i>1.4E+01</i>	1				GP	1.8E+01	1				GP	pCi/L
Uranium-233/234	<i>2.1E-01</i>	1	UI			GP							pCi/mL
Uranium-235	<i>1.1E-01</i>	1	UI			GP							pCi/L
Uranium-238	<i>-4.4E-02</i>	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/22/97	10/24/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	151.2	151.5	ft msl
pH	6.6	6.6	pH
Sp. conductance	200	21	µS/cm
Water temperature	22.0	19.8	°C
Alkalinity as CaCO ₃	87	82	mg/L
Turbidity	2.1	1	NTU
Volumes purged	2.9	2.4	well volume
Sampling code			
Synchronous water level	151.0 (09/10/97)	151.75 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	37	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	0.47	1	JE			GE	µg/L
Chromium, total recoverable	5.7	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.3	1	JE			GE	1.2	1	JE			GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,800	5				GE	8,700	10	V			WA	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.70	1	JE			GE							µg/L
Zinc, total recoverable	240	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<11	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 97A (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	4.6E-01	1	UJI			GP							pCi/L
Cesium-137	1.9E+00	1	UJI			GP							pCi/L
Cobalt-60	3.9E-01	1	UI			GP							pCi/L
Curium-242	3.8E-01	1	UI			GP							pCi/L
Curium-243/244	3.7E-01	1	UI			GP							pCi/L
Curium-245/246	1.7E-01	1	UI			GP							pCi/L
Gross alpha	3.8E+00	1				GP	2.7E+00	1				TM	pCi/L
Iodine-129	4.2E-01	1	UI			GP							pCi/L
Nonvolatile beta	6.6E+00	1				GP	1.2E+01	1	J			TM	pCi/L
Plutonium-238	-1.1E-02	1	UJI			GP							pCi/L
Plutonium-239/240	6.6E-02	1	UI			GP							pCi/L
Radium-226	3.9E-01	1				GP							pCi/L
Radium-228	1.0E-01	1	UI			GP							pCi/L
Strontium-90	9.4E-02	1	UI			GP							pCi/L
Technetium-99	-4.0E-01	1	UI			GP							pCi/L
Thorium-228	-1.2E-03	1	UI			GP							pCi/L
Thorium-230	3.9E-02	1	UI			GP							pCi/L
Thorium-232	-9.9E-03	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Total radium													
(Ra-226 plus Ra-228)	3.9E-01												pCi/L
Tritium	1.9E+02	1		■		GP	2.0E+02	1		■		TM	pCi/mL
Uranium-233/234	3.8E-01	1	UI			GP							pCi/L
Uranium-235	5.2E-02	1	UI			GP							pCi/L
Uranium-238	1.2E-01	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB1)

SAMPLE DATE	07/09/97	10/07/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	206.1	206.1	ft msl
pH	3.6	3.6	pH
Sp. conductance	1020	90	µS/cm
Water temperature	22.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	3	NTU
Volumes purged	2.1	0.86	well volume
Sampling code			
Synchronous water level	206.2 (09/10/97)	206.0 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	120	1	V			GE							µg/L
Cadmium, total recoverable	2.3	1	JE			GE	4.3	1	JE			GE	µg/L
Chromium, total recoverable	1.7	1	JE			GE							µg/L
Cobalt, total recoverable	59	1		■		GE							µg/L
Copper, total recoverable	15	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.4	1	JE			GE	4.2	1	JE			GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	18	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	110,000	200	V	■		GE	110,000	120		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	7.9	1		■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	55	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	31	1		■		GE							µg/L
Trichlorofluoromethane	1.2	1	JE			GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 97C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.4E+01	1		■		GP	pCi/L							
Cesium-137	1.7E+00	1	UJI			GP	pCi/L							
Cobalt-60	1.6E+00	1	UI			GP	pCi/L							
Curium-242	2.2E-01	1	UI			GP	pCi/L							
Curium-243/244	1.4E+01	1				GP	pCi/L							
Curium-245/246	1.2E+00	1	R4			GP	pCi/L							
Gross alpha	5.8E+02	1		■		GP	pCi/L	4.4E+02	1		■		GP	pCi/L
Iodine-129	3.9E+01	1				GP	pCi/L							
Nonvolatile beta	5.8E+02	1		■		GP	pCi/L	4.5E+02	1		■		GP	pCi/L
Plutonium-238	1.1E-02	1	UJI			GP	pCi/L							
Plutonium-239/240	3.6E-02	1	UI			GP	pCi/L							
Radium-226	2.7E+01	1		■		GP	pCi/L							
Radium-228	3.0E+01	1		■		GP	pCi/L							
Strontium-90	1.9E+02	1		■		GP	pCi/L							
Technetium-99	9.4E+01	1		■		GP	pCi/L							
Thorium-228	4.0E-01	1	UI			GP	pCi/L							
Thorium-230	1.5E-01	1	UI			GP	pCi/L							
Thorium-232	3.2E-02	1	UI			GP	pCi/L							
Total alpha emitters	5.0E+02			■			pCi/L							
Total beta emitters	3.5E+02			■			pCi/L							
Total radium														
(Ra-226 plus Ra-228)	5.7E+01			■			pCi/L							
Tritium	4.5E+03	1		■		GP	pCi/mL	4.2E+03	1		■		GP	pCi/mL
Uranium-233/234	1.9E+02	1		■		GP	pCi/L							
Uranium-235	1.5E+01	1		■		GP	pCi/L							
Uranium-238	2.6E+02	1		■		GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB2)

SAMPLE DATE	07/09/97	10/07/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	208.7	208.5	ft msl
pH	3.6	3.6	pH
Sp. conductance	740	520	µS/cm
Water temperature	22.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	8	12	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	208.6 (09/10/97)	208.12 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	270	1				GE							µg/L
Cadmium, total recoverable	4.5	1	JEV			GE	3.6	1	JE			GE	µg/L
Chromium, total recoverable	11	1	V			GE							µg/L
Cobalt, total recoverable	12	1		■		GE							µg/L
Copper, total recoverable	20	1	V			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	19	1	V	■		GE	23	1		■		GE	µg/L
Mercury, total recoverable	0.12	1	JE			GE							µg/L
Nickel, total recoverable	18	1	V			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	64,000	40	V	■		GE	67,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	1.1	1	JE			GE							µg/L
Thallium, total recoverable	3.9	1	JE	■		GE							µg/L
Vanadium, total recoverable	1.5	1	JE			GE							µg/L
Zinc, total recoverable	46	1				GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 97D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.7E+01	1		■		GP	pCi/L							
Cesium-137	6.3E+00	1	J			GP	pCi/L							
Cobalt-60	2.5E+00	1	UI			GP	pCi/L							
Curium-242	2.6E-02	1	UI			GP	pCi/L							
Curium-243/244	1.6E+01	1		■		GP	pCi/L							
Curium-245/246	2.9E-01	1	R4			GP	pCi/L							
Gross alpha	6.7E+02	1		■		GP	pCi/L	3.7E+02	1		■		GP	pCi/L
Iodine-129	4.1E+01	1				GP	pCi/L							
Nonvolatile beta	7.5E+02	1		■		GP	pCi/L	4.7E+02	1		■		GP	pCi/L
Plutonium-238	3.8E-01	1	UJI			GP	pCi/L							
Plutonium-239/240	9.9E-03	1	UI			GP	pCi/L							
Radium-226	7.1E+00	1	V	■		GP	pCi/L							
Radium-228	2.4E+01	1	V	■		GP	pCi/L							
Strontium-90	1.3E+02	1		■		GP	pCi/L							
Technetium-99	3.0E+01	1				GP	pCi/L							
Thorium-228	4.6E-01	1	UI			GP	pCi/L							
Thorium-230	2.4E-01	1	UI			GP	pCi/L							
Thorium-232	3.2E-02	1	UI			GP	pCi/L							
Total alpha emitters	6.9E+02			■			pCi/L							
Total beta emitters	2.3E+02			■			pCi/L							
Total radium														
(Ra-226 plus Ra-228)	3.1E+01			■			pCi/L							
Tritium	2.0E+03	1		■		GP	pCi/mL	2.1E+03	1		■		GP	pCi/mL
Uranium-233/234	1.9E+02	1		■		GP	pCi/L							
Uranium-235	2.1E+01	1		■		GP	pCi/L							
Uranium-238	4.5E+02	1		■		GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 98AR

<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>
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)

<u>SAMPLE DATE</u>	07/22/97	10/20/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	151.7	150.9	ft msl
pH	6.6	6.0	pH
Sp. conductance	120	120	µS/cm
Water temperature	24.0	21.0	°C
Alkalinity as CaCO ₃	26	33	mg/L
Turbidity	3	1	NTU
Volumes purged	2.6	2.6	well volume
Sampling code			
Synchronous water level	150.7 (09/10/97)	151.2 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<2.0	1	V			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	34	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	2.4	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,600	5				GE	3,200	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.92	1	JE			GE							µg/L
Zinc, total recoverable	<5.2	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<9.9	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 98AR (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.6E-01	1	UI			GP							pCi/L
Cesium-137	-3.6E-01	1	UJI			GP							pCi/L
Cobalt-60	1.1E+00	1	UI			GP							pCi/L
Curium-242	-2.7E-02	1	UI			GP							pCi/L
Curium-243/244	3.7E-02	1	UI			GP							pCi/L
Curium-245/246	2.2E-02	1	UI			GP							pCi/L
Gross alpha	7.5E-01	1				GP	2.6E+00	1				GP	pCi/L
Iodine-129	1.0E+00	1	URI4			GP							pCi/L
Nonvolatile beta	3.3E+00	1				GP	3.1E+01	1				GP	pCi/L
Plutonium-238	5.3E-01	1	UJI			GP							pCi/L
Plutonium-239/240	9.3E-02	1	UI			GP							pCi/L
Radium-226	7.1E-02	1	UI			GP							pCi/L
Radium-228	1.1E+00	1				GP							pCi/L
Strontium-90	7.0E-01	1	UI			GP							pCi/L
Technetium-99	5.2E+00	1	UI			GP							pCi/L
Thorium-228	-2.6E-02	1	UI			GP							pCi/L
Thorium-230	-9.3E-02	1	UI			GP							pCi/L
Thorium-232	-7.4E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	1.1E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.1E+00												pCi/L
Tritium	4.9E+01	1		■		GP	5.1E+01	1		■		GP	pCi/mL
Uranium-233/234	3.2E-01	1	UI			GP							pCi/L
Uranium-235	-1.1E-02	1	UI			GP							pCi/L
Uranium-238	1.2E-01	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 98C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75381.2 E50116.5	33.274264 °N 81.681258 °W	158.4-148.4 ft msl	284.5 ft msl	4" PVC	V	Barnwell (IIB1)

SAMPLE DATE	07/02/97	10/08/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	207.1	206.6	ft msl
pH	3.0	3.4	pH
Sp. conductance	660	700	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	2.1	2.2	well volume
Sampling code			
Synchronous water level	206.9 (09/10/97)	206.75 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	110	1	V			GE							µg/L
Cadmium, total recoverable	1.8	1	JE			GE	3.7	1	JE			GE	µg/L
Chromium, total recoverable	1.8	1	JE			GE							µg/L
Cobalt, total recoverable	67	1		■		GE							µg/L
Copper, total recoverable	26	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	0.73	1	JE			GE	13	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	12	1	J			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	70,000	40	V	■		GE	71,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	7.0	1		■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	26	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	3.8	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 98C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.3E+01	1				GP							pCi/L
Cesium-137	-9.1E-01	1	UJI			GP							pCi/L
Cobalt-60	1.6E+00	1	UI			GP							pCi/L
Curium-242	-4.4E-02	1	UI			GP							pCi/L
Curium-243/244	8.7E+00	1				GP							pCi/L
Curium-245/246	4.1E-01	1	R4			GP							pCi/L
Gross alpha	6.4E+02	1		■		GP	8.6E+02	1		■		GP	pCi/L
Iodine-129	3.0E+01	1				GP							pCi/L
Nonvolatile beta	5.3E+02	1	V	■		GP	5.8E+02	1		■		GP	pCi/L
Plutonium-238	5.9E-02	1	UJI			GP							pCi/L
Plutonium-239/240	-1.1E-02	1	UI			GP							pCi/L
Radium-226	2.0E+01	1	V	■		GP							pCi/L
Radium-228	1.3E+01	1		■		GP							pCi/L
Strontium-90	1.6E+02	1		■		GP							pCi/L
Technetium-99	4.3E+01	1	J			GP							pCi/L
Thorium-228	4.0E-01	1	UI			GP							pCi/L
Thorium-230	4.4E-01	1	UIV			GP							pCi/L
Thorium-232	0.0E+00	1	UI			GP							pCi/L
Total alpha emitters	7.9E+02			■									pCi/L
Total beta emitters	2.4E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	3.3E+01			■									pCi/L
Tritium	3.0E+03	1		■		GP	2.8E+03	1		■		GP	pCi/mL
Uranium-233/234	2.8E+02	1		■		GP							pCi/L
Uranium-235	2.8E+01	1		■		GP							pCi/L
Uranium-238	4.6E+02	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/02/97	10/08/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	209.7	209.4	ft msl
pH	3.4	3.4	pH
Sp. conductance	620	720	µS/cm
Water temperature	22.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	17	13	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	209.6 (09/10/97)	209.22 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	300	1	V			GE							µg/L
Cadmium, total recoverable	9.9	1	J	■		GE	6.8	1		■		GE	µg/L
Chromium, total recoverable	4.8	1	JE			GE							µg/L
Cobalt, total recoverable	22	1		■		GE							µg/L
Copper, total recoverable	87	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	19	1		■		GE	7.3	1				GE	µg/L
Mercury, total recoverable	0.80	1				GE							µg/L
Nickel, total recoverable	16	1	J			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	63,000	40	V	■		GE	40,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.64	1	JE			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	2.0	1	JE			GE							µg/L
Zinc, total recoverable	63	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 98D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.0E+01	1		■		GP							pCi/L
Cesium-137	<i>-3.1E-01</i>	1	UJI			GP							pCi/L
Cobalt-60	<i>7.4E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>-1.0E-02</i>	1	UI			GP							pCi/L
Curium-243/244	1.7E+01	1		■		GP							pCi/L
Curium-245/246	2.8E-01	1	R4			GP							pCi/L
Gross alpha	3.3E+02	1		■		GP	4.0E+02	1		■		GP	pCi/L
Iodine-129	1.9E+01	1				GP							pCi/L
Nonvolatile beta	7.0E+02	1	V	■		GP	6.2E+02	1		■		GP	pCi/L
Plutonium-238	<i>-1.1E-02</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>8.1E-03</i>	1	UI			GP							pCi/L
Radium-226	8.0E+00	1	V	■		GP							pCi/L
Radium-228	5.0E+01	1		■		GP							pCi/L
Strontium-90	2.9E+02	1		■		GP							pCi/L
Technetium-99	2.0E+01	1	J			GP							pCi/L
Thorium-228	<i>3.7E-01</i>	1	UI			GP							pCi/L
Thorium-230	<i>5.5E-01</i>	1	UIV			GP							pCi/L
Thorium-232	<i>8.0E-02</i>	1	UI			GP							pCi/L
Total alpha emitters	6.2E+02			■									pCi/L
Total beta emitters	3.8E+02			■									pCi/L
Total radium (Ra-226 plus Ra-228)	5.8E+01			■									pCi/L
Tritium	1.3E+03	1		■		GP	1.4E+03	1		■		GP	pCi/mL
Uranium-233/234	1.7E+02	1		■		GP							pCi/L
Uranium-235	1.8E+01	1		■		GP							pCi/L
Uranium-238	4.0E+02	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/14/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	150.3	150.4	ft msl
pH	6.4	6.6	pH
Sp. conductance	160	120	µS/cm
Water temperature	20.9	20.0	°C
Alkalinity as CaCO ₃	75	42	mg/L
Turbidity	1	1	NTU
Volumes purged	3.1	2.7	well volume
Sampling code			
Synchronous water level	149.8 (09/10/97)	150.3 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	30	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	1.3	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.11	1	JV			GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	5,800	5	V			GE	5,400	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<0.69	1	V			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<0.79	1	V			GE							µg/L
Zinc, total recoverable	<4.0	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 99A (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.7E-01	1	UI			GP	pCi/L							
Cesium-137	5.6E-02	1	UI			GP	pCi/L							
Cobalt-60	3.3E+00	1	UI			GP	pCi/L							
Curium-242	-1.3E-02	1	UI			GP	pCi/L							
Curium-243/244	1.4E-01	1	UI			GP	pCi/L							
Curium-245/246	4.1E-02	1	UI			GP	pCi/L							
Gross alpha	1.6E+00	1				GP	pCi/L	1.9E+00	1				GP	pCi/L
Iodine-129	1.9E+00	1	R4			GP	pCi/L							
Nonvolatile beta	2.0E+00	1				GP	pCi/L	3.3E+00	1				GP	pCi/L
Plutonium-238	9.9E-02	1	UJI			GP	pCi/L							
Plutonium-239/240	-8.2E-02	1	UI			GP	pCi/L							
Radium-226	0.0E+00	1	UI			GP	pCi/L							
Radium-228	1.0E+00	1	UIV			GP	pCi/L							
Strontium-90	4.7E+00	1	J			GP	pCi/L							
Technetium-99	1.9E+00	1	UI			GP	pCi/L							
Thorium-228	7.6E-02	1	UI			GP	pCi/L							
Thorium-230	9.5E-02	1	UI			GP	pCi/L							
Thorium-232	4.3E-02	1	UI			GP	pCi/L							
Total alpha emitters														
Total beta emitters	4.7E+00						pCi/L							
Tritium	1.7E+02	1		■		GP	pCi/mL	1.7E+02	1		■		GP	pCi/mL
Uranium-233/234	5.5E-02	1	UI			GP	pCi/L							
Uranium-235	2.0E-02	1	UI			GP	pCi/L							
Uranium-238	4.1E-02	1	UI			GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 99C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75683.7 E50320.6	33.275266 °N 81.681308 °W	167.2-157.2 ft msl	287.7 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/17/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	207.8	207.7	ft msl
pH	5.0	5.2	pH
Sp. conductance	220	200	µS/cm
Water temperature	20.9	19.0	°C
Alkalinity as CaCO ₃	1	2	mg/L
Turbidity	1	1	NTU
Volumes purged	2.9	2.9	well volume
Sampling code			
Synchronous water level	207.5 (09/10/97)	207.42 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	58	1				WA							µg/L
Cadmium, total recoverable	1.7	1	JEV			GE	1.7	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	5.6	1	V	■		WA							µg/L
Copper, total recoverable	2.6	1	JE			WA							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<1.9	1	JEV			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	0.21	1				GE							µg/L
Nickel, total recoverable	2.6	1	JE			WA							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	35,000	50	V	■		WA	26,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	1.5	1	JE			GE							µg/L
Thallium, total recoverable	5.7	1	JE	■		WA							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	29	1	JE			WA							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<7.3	1	VY			WA							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<3.6	1				WA							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	75	1		■		WA							µg/L
Trichlorofluoromethane	3.4	1	JE			WA							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 99C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	0.0E+00	1	UI			GP	pCi/L
Cesium-137	-1.8E-02	1	UI			GP	pCi/L
Cobalt-60	2.0E-02	1	UI			TM	pCi/L
Curium-242	1.3E-01	1	UI			GP	pCi/L
Curium-243/244	-5.0E-02	1	UI			TM	pCi/L
Curium-245/246	0.0E+00	1	UI			GP	pCi/L
Gross alpha	3.1E+01	1		■		GP	pCi/L
Iodine-129	8.3E+00	1	J			GP	pCi/L
Nonvolatile beta	1.0E+02	1		■		TM	pCi/L
Plutonium-238	8.0E-02	1	UI			TM	pCi/L
Plutonium-239/240	3.2E-03	1	UI			GP	pCi/L
Radium-226	5.5E+00	1		■		GP	pCi/L
Radium-228	3.1E+01	1		■		TM	pCi/L
Strontium-90	2.6E+01	1		■		GP	pCi/L
Technetium-99	1.1E+02	1		■		TM	pCi/L
Thorium-228	-6.1E-02	1	UI			GP	pCi/L
Thorium-230	5.0E-01	1	J1			TM	pCi/L
Thorium-232	0.0E+00	1	UI			TM	pCi/L
Total alpha emitters	1.5E+01			■			pCi/L
Total beta emitters	1.7E+02			■			pCi/L
Total radium							
(Ra-226 plus Ra-228)	3.6E+01			■			pCi/L
Tritium	1.4E+03	1		■		TM	pCi/mL
Uranium-233/234	5.9E+00	1				GP	pCi/L
Uranium-235	5.8E-01	1				GP	pCi/L
Uranium-238	8.3E+00	1				TM	pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/14/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	210.8	210.6	ft msl
pH	4.4	6.6	pH
Sp. conductance	30	100	µS/cm
Water temperature	21.7	20.0	°C
Alkalinity as CaCO ₃	0	37	mg/L
Turbidity	3	38	NTU
Volumes purged	5.8	0.12	well volume
Sampling code		XN	
Synchronous water level	210.7 (09/10/97)	210.45 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	7.2	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	0.25	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	17	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	6.7	1				GE	48	1		■		GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,600	1	V			GE	3,600	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<17	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	63	1		■		GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB 99D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.5E-01	1	UJI			GP							pCi/L
Cesium-137	-1.9E+00	1	UI			GP							pCi/L
Cobalt-60	1.6E+00	1	UI			GP							pCi/L
Curium-242	-1.9E-02	1	UI			GP							pCi/L
Curium-243/244	8.2E-02	1	UJI			GP							pCi/L
Curium-245/246	0.0E+00	1	UI			GP							pCi/L
Gross alpha	1.3E+01	1				GP	8.0E+00	1				GP	pCi/L
Iodine-129	6.6E-01	1	UJI			GP							pCi/L
Nonvolatile beta	8.7E+00	1				GP	1.7E+01	1				GP	pCi/L
Plutonium-238	1.5E-01	1	UJI			GP							pCi/L
Plutonium-239/240	6.2E-02	1	UI			GP							pCi/L
Radium-226	2.2E-01	1	UI			GP							pCi/L
Radium-228	1.3E+00	1	UIV			GP							pCi/L
Strontium-90	1.2E+01	1	J	■		GP							pCi/L
Technetium-99	-4.7E+00	1	UI			GP							pCi/L
Thorium-228	-9.4E-02	1	UI			GP							pCi/L
Thorium-230	-7.1E-02	1	UI			GP							pCi/L
Thorium-232	-7.1E-02	1	UI			GP							pCi/L
Total alpha emitters	1.2E+01												pCi/L
Total beta emitters	1.2E+01												pCi/L
Tritium	1.5E+01	1				GP	9.4E+01	1		■		GP	pCi/mL
Uranium-233/234	3.2E+00	1				GP							pCi/L
Uranium-235	2.7E-01	1				GP							pCi/L
Uranium-238	8.3E+00	1				GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/22/97	10/21/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	150.9	150.7	ft msl
pH	6.6	6.6	pH
Sp. conductance	160	180	µS/cm
Water temperature	20.5	18.0	°C
Alkalinity as CaCO ₃	74	48	mg/L
Turbidity	0	2	NTU
Volumes purged	2.7	3.3	well volume
Sampling code			
Synchronous water level	150.7 (09/10/97)	151.13 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<2.7	1	V			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	43	1				GE							µg/L
Cadmium, total recoverable	<4.7	1	Y			WA	0.26	1	JE			GE	µg/L
Chromium, total recoverable	2.8	1	JE			GE							µg/L
Cobalt, total recoverable	<1.3	1	VY			WA							µg/L
Copper, total recoverable	1.5	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	5,400	10	VY			WA	4,000	3	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.72	1	JE			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.94	1	JE			GE							µg/L
Zinc, total recoverable	6.9	1	JEY			WA							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	13	1		■		GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	530	5	Y	■		WA							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB100A (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.1E-01	1	UJI			GP	pCi/L							
Cesium-137	-5.9E-02	1	UJI			GP	pCi/L							
Cobalt-60	9.0E-02	1	UI			TM	pCi/L							
Curium-242	3.0E-02	1	UI			TM	pCi/L							
Curium-243/244	-2.9E-02	1	UI			GP	pCi/L							
Curium-245/246	2.2E-02	1	UI			GP	pCi/L							
Gross alpha	1.8E+00	1				TM	pCi/L	1.5E+00	1				GP	pCi/L
Iodine-129	1.9E+00	1				GP	pCi/L							
Nonvolatile beta	4.2E+00	1				GP	pCi/L	2.2E+00	1				GP	pCi/L
Plutonium-238	4.0E-02	1	UI			TM	pCi/L							
Plutonium-239/240	0.0E+00	1	UI			TM	pCi/L							
Radium-226	7.4E-01	1				GP	pCi/L							
Radium-228	1.5E+00	1				GP	pCi/L							
Strontium-90	2.7E+00	1	J			TM	pCi/L							
Technetium-99	-3.4E-01	1	UI			GP	pCi/L							
Thorium-228	4.4E-01	1	J1			TM	pCi/L							
Thorium-230	6.6E-02	1	UI			GP	pCi/L							
Thorium-232	0.0E+00	1	UI			TM	pCi/L							
Total alpha emitters	4.4E-01						pCi/L							
Total beta emitters	6.1E+00						pCi/L							
Total radium														
(Ra-226 plus Ra-228)	2.2E+00						pCi/L							
Tritium	8.1E+01	1		■		GP	pCi/mL	7.2E+01	1		■		GP	pCi/mL
Uranium-233/234	2.2E-01	1	UI			GP	pCi/L							
Uranium-235	0.0E+00	1	UI			TM	pCi/L							
Uranium-238	4.0E-02	1	UI			TM	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB101A

<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>
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	07/07/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	151.1	151.1	ft msl
pH	6.6	6.7	pH
Sp. conductance	140	175	µS/cm
Water temperature	21.6	19.6	°C
Alkalinity as CaCO ₃	79	61	mg/L
Turbidity	1	1	NTU
Volumes purged	3.9		well volume
Sampling code			
Synchronous water level	151.1 (09/10/97)	151.35 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1	J			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	28	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<4.7	1				WA	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.5	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,400	1				GE	1,600	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.59	1	JE			GE							µg/L
Zinc, total recoverable	5.9	1				GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB101A (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>-4.7E-02</i>	1	UI			GP							pCi/L
Cesium-137	<i>3.8E+00</i>	1	UI			GP							pCi/L
Cobalt-60	<i>4.2E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>-2.1E-02</i>	1	UI			GP							pCi/L
Curium-243/244	<i>6.5E-02</i>	1	UI			GP							pCi/L
Curium-245/246	<i>1.8E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>7.0E-01</i>	1	UI			GP	1.2E+00	1				GP	pCi/L
Iodine-129	<i>1.6E-01</i>	1	UI			GP							pCi/L
Nonvolatile beta	<i>3.7E+00</i>	1				GP	5.4E+00	1				TM	pCi/L
Plutonium-238	<i>-2.5E-02</i>	1	UI			GP							pCi/L
Plutonium-239/240	<i>5.8E-04</i>	1	UI			GP							pCi/L
Radium-226	<i>1.8E+00</i>	1				GP							pCi/L
Radium-228	<i>1.0E+00</i>	1	UI			GP							pCi/L
Strontium-90	<i>3.8E-01</i>	1	UJI			GP							pCi/L
Technetium-99	<i>1.4E+00</i>	1	UI			GP							pCi/L
Thorium-228	<i>1.4E-01</i>	1	R4			GP							pCi/L
Thorium-230	<i>8.5E-01</i>	1	RV4			GP							pCi/L
Thorium-232	<i>1.3E-01</i>	1	R4			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Total radium													
(Ra-226 plus Ra-228)	<i>1.8E+00</i>												pCi/L
Tritium	<i>3.5E-01</i>	1	UI			GP	3.3E+01	1		■		TM	pCi/mL
Uranium-233/234	<i>5.8E-02</i>	1	UI			GP							pCi/L
Uranium-235	<i>1.0E-02</i>	1	UI			GP							pCi/L
Uranium-238	<i>6.5E-02</i>	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB102C

<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>
N73582.9 E50834.8	33.271459 °N 81.675873 °W	155.9-145.9 ft msl	201.1 ft msl	4" PVC	V	Barnwell (IIB1)

SAMPLE DATE	07/09/97	10/13/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	194.8	194.2	ft msl
pH	4.6	4.4	pH
Sp. conductance	220	220	µS/cm
Water temperature	19.0	19.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	3.1	2.3	well volume
Sampling code			
Synchronous water level	194.4 (09/10/97)	195.19 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	4.0	1	JE			GE	3.0	1	JEV			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	26,000	20	V	■		GE	21,000	20		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB102C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+01	1				GP	8.9E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	2.7E+02	1		■		GP	2.1E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.9E+02	1		■		GP	4.6E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB1)

SAMPLE DATE	07/23/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	201.3	200.8	ft msl
pH	5.2	5.4	pH
Sp. conductance	240	260	µS/cm
Water temperature	22.0	19.0	°C
Alkalinity as CaCO ₃	5	3	mg/L
Turbidity	2	2	NTU
Volumes purged	2.5	2.9	well volume
Sampling code			
Synchronous water level	200.8 (09/10/97)	200.65 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	35	1	V			GE							µg/L
Cadmium, total recoverable	0.41	1	JE			GE	0.32	1	JE			GE	µg/L
Chromium, total recoverable	3.4	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	12	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.6	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	3.6	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	19,000	20	V	■		GE	25,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.97	1	JE			GE							µg/L
Zinc, total recoverable	53	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB103C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>-6.4E-02</i>	1	UJI			GP							pCi/L
Cesium-137	<i>-1.1E+00</i>	1	UJI			GP							pCi/L
Cobalt-60	<i>-5.1E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>-9.0E-03</i>	1	UI			GP							pCi/L
Curium-243/244	<i>-2.8E-03</i>	1	UJI			GP							pCi/L
Curium-245/246	<i>1.2E-01</i>	1	UI			GP							pCi/L
Gross alpha	1.6E+00	1				GP	2.2E+00	1	J			GP	pCi/L
Iodine-129	6.4E+00	1				GP							pCi/L
Nonvolatile beta	2.9E+01	1				GP	9.5E+00	1				GP	pCi/L
Plutonium-238	1.5E+00	1	J			GP							pCi/L
Plutonium-239/240	<i>-3.5E-02</i>	1	UI			GP							pCi/L
Radium-226	7.0E-01	1				GP							pCi/L
Radium-228	7.0E-01	1	UI			GP							pCi/L
Strontium-90	<i>-4.7E-01</i>	1	UJI			GP							pCi/L
Technetium-99	4.1E+01	1				GP							pCi/L
Thorium-228	2.2E-01	1	UI			GP							pCi/L
Thorium-230	5.2E-02	1	UI			GP							pCi/L
Thorium-232	<i>-1.7E-02</i>	1	UI			GP							pCi/L
Total alpha emitters	1.9E+00												pCi/L
Total beta emitters	4.8E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	7.0E-01												pCi/L
Tritium	6.1E+02	1		■		GP	6.0E+02	1		■		GP	pCi/mL
Uranium-233/234	2.2E-01	1				GP							pCi/L
Uranium-235	6.1E-03	1	UI			GP							pCi/L
Uranium-238	1.6E-01	1				GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Barnwell (IIB1)

SAMPLE DATE	07/15/97	10/20/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	200.1	199.4	ft msl
pH	4.8	4.6	pH
Sp. conductance	380	180	µS/cm
Water temperature	21.7	20.0	°C
Alkalinity as CaCO ₃	0	1	mg/L
Turbidity	1	1	NTU
Volumes purged	2.9	2.6	well volume
Sampling code			
Synchronous water level	199.2 (09/10/97)	199.9 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	1.2	1	JE			GE	0.96	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	2.1	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	48,000	40	V	■		GE	44,000	40	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB104C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.6E+00	1				GP	4.2E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	3.6E+01	1				GP	2.6E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	9.5E+02	1		■		GP	1.0E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB104D

<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>
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)

<u>SAMPLE DATE</u>	07/07/97	10/13/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	203.3	202.7	ft msl
pH	3.6	3.4	pH
Sp. conductance	520	1000	µS/cm
Water temperature	22.3	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	2.4	2.5	well volume
Sampling code			
Synchronous water level	202.9 (09/10/97)	203.55 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	180	1	V			GE							µg/L
Cadmium, total recoverable	4.9	1	JE			GE	6.1	1		■		GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	17	1		■		GE							µg/L
Copper, total recoverable	460	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	490	1		■		GE	12	1				GE	µg/L
Mercury, total recoverable	0.25	1				GE							µg/L
Nickel, total recoverable	10	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	78,000	40	V	■		GE	85,000	80		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	280	2	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB104D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.0E+01	1				GP	pCi/L
Cesium-137	3.5E-01	1	UJI			GP	pCi/L
Cobalt-60	-2.4E-01	1	UI			GP	pCi/L
Curium-242	5.0E-03	1	UI			GP	pCi/L
Curium-243/244	9.9E+00	1				GP	pCi/L
Curium-245/246	1.6E-01	1	R4			GP	pCi/L
Gross alpha	3.8E+02	1		■		GP	pCi/L
Iodine-129	1.5E+01	1				GP	pCi/L
Nonvolatile beta	4.6E+02	1		■		GP	pCi/L
Plutonium-238	7.8E-02	1	UJI			GP	pCi/L
Plutonium-239/240	4.2E-02	1	UI			GP	pCi/L
Radium-226	2.1E+01	1		■		GP	pCi/L
Radium-228	2.1E+01	1		■		GP	pCi/L
Strontium-90	2.0E+02	1		■		GP	pCi/L
Technetium-99	3.5E+01	1	J			GP	pCi/L
Thorium-228	3.1E-01	1	UI			GP	pCi/L
Thorium-230	6.9E-01	1	UIV			GP	pCi/L
Thorium-232	-6.9E-02	1	UI			GP	pCi/L
Total alpha emitters	4.7E+02			■			pCi/L
Total beta emitters	2.7E+02			■			pCi/L
Total radium							pCi/L
(Ra-226 plus Ra-228)	4.1E+01			■			pCi/L
Tritium	3.5E+03	1		■		GP	pCi/mL
Uranium-233/234	2.0E+02	1		■		GP	pCi/L
Uranium-235	1.9E+01	1		■		GP	pCi/L
Uranium-238	2.4E+02	1		■		GP	pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB105C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75234.2 E49828.0	33.273468 °N 81.681732 °W	151.5-141.5 ft msl	285.8 ft msl	4" PVC	V	Bamwell (IIB1)

SAMPLE DATE	07/08/97	10/07/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	227.2	205.3	ft msl
pH	3.2	3.4	pH
Sp. conductance	1020	1040	µS/cm
Water temperature	22.4	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.0	2.4	well volume
Sampling code			
Synchronous water level	208.7 (09/10/97)	205.4 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<50	5				GE							µg/L
Arsenic, total recoverable	<25	5				GE							µg/L
Barium, total recoverable	220	5	V			GE							µg/L
Cadmium, total recoverable	8.3	5	JE	■		GE	8.1	1		■		GE	µg/L
Chromium, total recoverable	<25	5				GE							µg/L
Cobalt, total recoverable	150	5		■		GE							µg/L
Copper, total recoverable	14	5	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<25	5				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	0.40	1				GE							µg/L
Nickel, total recoverable	17	5	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	180,000	200		■		GE	160,000	200		■		GE	µg/L
Selenium, total recoverable	<25	5				GE							µg/L
Silver, total recoverable	<25	5	V			GE							µg/L
Thallium, total recoverable	21	5	JE	■		GE							µg/L
Vanadium, total recoverable	<25	5				GE							µg/L
Zinc, total recoverable	80	5	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	3.6	1	JE	■		GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	9.5	1		■		GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB105C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.1E+01	1		■		GP							pCi/L
Cesium-137	1.5E+00	1	UJI			GP							pCi/L
Cobalt-60	3.1E+00	1	UI			GP							pCi/L
Curium-242	~3.8E-01	1	UI			GP							pCi/L
Curium-243/244	1.4E+01	1				GP							pCi/L
Curium-245/246	8.6E-01	1	UI			GP							pCi/L
Gross alpha	2.6E+02	1		■		GP	5.0E+02	1		■		GP	pCi/L
Iodine-129	4.4E+01	1				GP							pCi/L
Nonvolatile beta	3.4E+02	1		■		GP	9.9E+02	1		■		GP	pCi/L
Plutonium-238	4.0E-02	1	UJI			GP							pCi/L
Plutonium-239/240	1.5E-02	1	UI			GP							pCi/L
Radium-226	7.4E+01	1	V	■		GP							pCi/L
Radium-228	3.3E+01	1		■		GP							pCi/L
Strontium-90	3.7E+02	1		■		GP							pCi/L
Technetium-99	1.1E+02	1	J	■		GP							pCi/L
Thorium-228	4.1E-01	1	UI			GP							pCi/L
Thorium-230	3.2E-01	1	UIV			GP							pCi/L
Thorium-232	0.0E+00	1	UI			GP							pCi/L
Total alpha emitters	4.1E+02			■									pCi/L
Total beta emitters	5.6E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.1E+02			■									pCi/L
Tritium	7.2E+03	1		■		GP	7.1E+03	1		■		GP	pCi/mL
Uranium-233/234	1.8E+02	1		■		GP							pCi/L
Uranium-235	1.3E+01	1				GP							pCi/L
Uranium-238	1.9E+02	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB105DR

<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>
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)

<u>SAMPLE DATE</u>	07/10/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	208.5	208.4	ft msl
pH	3.8	3.6	pH
Sp. conductance	100	100	µS/cm
Water temperature	22.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	1	NTU
Volumes purged	3.7	3.5	well volume
Sampling code			
Synchronous water level	205.4 (09/10/97)	208.0 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	89	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	6.7	1				GE							µg/L
Copper, total recoverable	5.8	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,200	20	V			GE	6,600	20				GE	µg/L
Selenium, total recoverable	1.8	1	JE			GE							µg/L
Silver, total recoverable	<0.84	1	V			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<8.7	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	1.1	1	E			GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB105DR (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	6.6E-01	1	UJI			GP							pCi/L
Cesium-137	-1.9E+00	1	UI			GP							pCi/L
Cobalt-60	-3.7E-01	1	UI			GP							pCi/L
Curium-242	1.9E-01	1	UI			GP							pCi/L
Curium-243/244	9.2E-01	1	R4			GP							pCi/L
Curium-245/246	5.5E-02	1	UI			GP							pCi/L
Gross alpha	1.7E+02	1		■		GP	1.5E+02	1	J	■		GP	pCi/L
Iodine-129	1.0E+01	1	J			GP							pCi/L
Nonvolatile beta	7.4E+01	1		■		GP	9.9E+01	1		■		GP	pCi/L
Plutonium-238	-1.9E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-7.5E-02	1	UI			GP							pCi/L
Radium-226	3.4E+00	1				GP							pCi/L
Radium-228	5.0E+00	1	V	■		GP							pCi/L
Strontium-90	3.3E+01	1	J	■		GP							pCi/L
Technetium-99	3.3E+00	1	UI			GP							pCi/L
Thorium-228	-1.1E-01	1	UI			GP							pCi/L
Thorium-230	6.7E-01	1	UIV			GP							pCi/L
Thorium-232	2.1E-02	1	UI			GP							pCi/L
Total alpha emitters	2.0E+02			■									pCi/L
Total beta emitters	4.8E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	8.4E+00			■									pCi/L
Tritium	6.9E+01	1		■		GP	6.5E+01	1		■		GP	pCi/mL
Uranium-233/234	5.5E+01	1		■		GP							pCi/L
Uranium-235	5.0E+00	1				GP							pCi/L
Uranium-238	1.4E+02	1		■		GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB1)

SAMPLE DATE	07/09/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	200.0	200.7	ft msl
pH	4.6	4.6	pH
Sp. conductance	560	580	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	5	0	mg/L
Turbidity	1	1	NTU
Volumes purged	4.1	2.2	well volume
Sampling code			
Synchronous water level	199.7 (09/10/97)	200.42 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	6.4	5	JE	■		GE	6.1	1		■		GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<25	5				GE	2.5	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	73,000	40	V	■		GE	70,000	40		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB106C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	4.9E+01	1		■		GP	6.4E+01	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	5.5E+02	1		■		GP	7.4E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.5E+03	1		■		GP	1.4E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB106D

<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>
N74193.0 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	07/14/97	10/27/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation			
pH			
Sp. conductance			
Water temperature			
Alkalinity as CaCO ₃			mg/L
Turbidity			
Volumes purged			
Sampling code	DS	1	
Synchronous water level	DS (09/10/97)	DS (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable													
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable													
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen													
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB106D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha													
Iodine-129													
Nonvolatile beta													
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium													
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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 (IIB1)

SAMPLE DATE	07/23/97	10/02/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	208.9	208.4	ft msl
pH	6.0	6.2	pH
Sp. conductance	140	160	µS/cm
Water temperature	21.6	19.0	°C
Alkalinity as CaCO ₃	54	31	mg/L
Turbidity	2.0	3	NTU
Volumes purged	2.6	3.0	well volume
Sampling code			
Synchronous water level	208.5 (09/10/97)	208.5 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	30	1	V			GE							µg/L
Cadmium, total recoverable	0.43	1	JE			GE	0.42	1	JE			GE	µg/L
Chromium, total recoverable	1.6	1	JE			GE							µg/L
Cobalt, total recoverable	<1.3	1	VY			WA							µg/L
Copper, total recoverable	2.8	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	6,700	10	VY			WA	5,500	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.48	1	JE			GE							µg/L
Zinc, total recoverable	15	1	JEY			WA							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	6.9	1	JEY			WA							µg/L
Dichloromethane	<1.8	1	VY			WA							µg/L
Phenols	55	1	Y			WA							µg/L
Tetrachloroethylene	1.5	1	JY			WA							µg/L
Trichloroethylene	1.4	1	JY			WA							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB107C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>1.8E-02</i>	1	UJI			GP							pCi/L
Cesium-137	<i>-6.0E-02</i>	1	UI			TM							pCi/L
Cobalt-60	<i>-2.7E-02</i>	1	UI			GP							pCi/L
Curium-242	<i>2.3E-02</i>	1	UI			GP							pCi/L
Curium-243/244	<i>2.9E-01</i>	1	UJI			GP							pCi/L
Curium-245/246	<i>0.0E+00</i>	1	UI			GP							pCi/L
Gross alpha	<i>2.0E+00</i>	1				GP	1.7E+00	1	J			GP	pCi/L
Iodine-129	<i>1.3E+00</i>	1				GP							pCi/L
Nonvolatile beta	<i>3.2E+01</i>	1				GP	2.7E+01	1				GP	pCi/L
Plutonium-238	<i>4.8E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>1.7E-01</i>	1	UI			GP							pCi/L
Radium-226	<i>7.8E-01</i>	1	J1			TM							pCi/L
Radium-228	<i>3.1E-01</i>	1	UI			GP							pCi/L
Strontium-90	<i>1.2E+01</i>	1		■		TM							pCi/L
Technetium-99	<i>-1.9E+00</i>	1	UI			GP							pCi/L
Thorium-228	<i>3.0E-03</i>	1	UI			GP							pCi/L
Thorium-230	<i>7.6E-02</i>	1	UI			GP							pCi/L
Thorium-232	<i>-1.8E-01</i>	1	UI			GP							pCi/L
Total alpha emitters	<i>5.6E-01</i>												pCi/L
Total beta emitters	<i>1.3E+01</i>												pCi/L
Total radium													
(Ra-226 plus Ra-228)	<i>7.8E-01</i>												pCi/L
Tritium	<i>8.4E+01</i>	1		■		TM	8.8E+01	1		■		GP	pCi/mL
Uranium-233/234	<i>5.6E-01</i>	1				GP							pCi/L
Uranium-235	<i>0.0E+00</i>	1	UI			GP							pCi/L
Uranium-238	<i>2.3E-01</i>	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/08/97	10/08/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	211.9	211.5	ft msl
pH	3.6	3.6	pH
Sp. conductance	320	520	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	1	NTU
Volumes purged	12	2.5	well volume
Sampling code			
Synchronous water level	211.7 (09/10/97)	211.48 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<100	10				GE							µg/L
Arsenic, total recoverable	<50	10	J3			GE							µg/L
Barium, total recoverable	130	10	V			GE							µg/L
Cadmium, total recoverable	3.9	10	JE			GE	3.8	1	JE			GE	µg/L
Chromium, total recoverable	<50	10	J3			GE							µg/L
Cobalt, total recoverable	10	10	JE	■		GE							µg/L
Copper, total recoverable	21	10	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	11	10	JE			GE	56	1		■		GE	µg/L
Mercury, total recoverable	5.8	1		■		GE							µg/L
Nickel, total recoverable	<50	10	J3			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	38,000	20		■		GE	54,000	40		■		GE	µg/L
Selenium, total recoverable	<50	10	JV3			GE							µg/L
Silver, total recoverable	<50	10				GE							µg/L
Thallium, total recoverable	<50	10				GE							µg/L
Vanadium, total recoverable	52	10	V	■		GE							µg/L
Zinc, total recoverable	42	10	JEV			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB107D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.9E+01	1		■		GP	pCi/L							
Cesium-137	6.8E-01	1	UJI			GP	pCi/L							
Cobalt-60	1.0E+00	1	UI			GP	pCi/L							
Curium-242	-5.4E-03	1	UI			GP	pCi/L							
Curium-243/244	7.5E+00	1				GP	pCi/L							
Curium-245/246	1.2E+00	1	R4			GP	pCi/L							
Gross alpha	6.1E+02	1		■		GP	pCi/L	9.0E+02	1		■		GP	pCi/L
Iodine-129	9.6E+01	1		■		GP	pCi/L							
Nonvolatile beta	4.7E+02	1		■		GP	pCi/L	8.5E+02	1		■		GP	pCi/L
Plutonium-238	-4.7E-02	1	UI			GP	pCi/L							
Plutonium-239/240	-4.4E-02	1	UI			GP	pCi/L							
Radium-226	1.1E+01	1		■		GP	pCi/L							
Radium-228	1.7E+01	1	V	■		GP	pCi/L							
Strontium-90	2.4E+02	1	J	■		GP	pCi/L							
Technetium-99	5.1E+01	1	R4	■		GP	pCi/L							
Thorium-228	2.1E-01	1	R4			GP	pCi/L							
Thorium-230	4.5E-01	1	RV4			GP	pCi/L							
Thorium-232	7.3E-02	1	R4			GP	pCi/L							
Total alpha emitters	6.6E+02			■			pCi/L							
Total beta emitters	3.5E+02			■			pCi/L							
Total radium (Ra-226 plus Ra-228)	2.9E+01			■			pCi/L							
Tritium	1.7E+03	1		■		GP	pCi/mL	1.7E+03	1		■		GP	pCi/mL
Uranium-233/234	2.7E+02	1		■		GP	pCi/L							
Uranium-235	2.7E+01	1		■		GP	pCi/L							
Uranium-238	3.3E+02	1		■		GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/02/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	215.4	215.0	ft msl
pH	5.2	4.6	pH
Sp. conductance	30	72	µS/cm
Water temperature	22.1	20.0	°C
Alkalinity as CaCO ₃	6	0	mg/L
Turbidity	2	5	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	215.2 (09/10/97)	214.8 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	12	1				GE	12	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	960	1				GE	840	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB108D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.6E+00	1				GP	1.7E+00	1	J			GP	pCi/L
Iodine-129													
Nonvolatile beta	2.1E+00	1				GP	7.4E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.0E+01	1				GP	1.0E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (11B2)

SAMPLE DATE	07/14/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	211.5	211.2	ft msl
pH	5.2	5.2	pH
Sp. conductance	30	120	µS/cm
Water temperature	23.8	20.0	°C
Alkalinity as CaCO ₃	27	0	mg/L
Turbidity	1	9	NTU
Volumes purged	4.0	0.0	well volume
Sampling code		XN	
Synchronous water level	211.4 (09/10/97)	211.05 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	7.8	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	30	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	15	1				GE	7.4	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,500	1	V			GE	600	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	200	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB109D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.5E-02	1	UI			GP							pCi/L
Cesium-137	-1.9E+00	1	UI			GP							pCi/L
Cobalt-60	3.6E-01	1	UI			GP							pCi/L
Curium-242	-1.1E-02	1	UI			GP							pCi/L
Curium-243/244	1.1E-01	1	UI			GP							pCi/L
Curium-245/246	4.1E-02	1	UI			GP							pCi/L
Gross alpha	4.1E-01	1	UI			GP	4.0E+00	1	J			GP	pCi/L
Iodine-129	2.7E-01	1	UJI			GP							pCi/L
Nonvolatile beta	1.7E+00	1				GP	4.6E+00	1				GP	pCi/L
Plutonium-238	1.8E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-4.7E-03	1	UI			GP							pCi/L
Radium-226	2.1E-01	1	UI			GP							pCi/L
Radium-228	1.6E+00	1	UIV			GP							pCi/L
Strontium-90	1.5E-01	1	UJI			GP							pCi/L
Technetium-99	-5.2E+00	1	UI			GP							pCi/L
Thorium-228	7.9E-02	1	UI			GP							pCi/L
Thorium-230	6.3E-02	1	UI			GP							pCi/L
Thorium-232	-5.8E-03	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	1.2E+01	1				GP	1.5E+01	1				GP	pCi/mL
Uranium-233/234	2.6E-02	1	UI			GP							pCi/L
Uranium-235	-1.2E-02	1	UI			GP							pCi/L
Uranium-238	-1.1E-02	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Bamwell (IIB1)

SAMPLE DATE	07/17/97	10/02/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	199.7	199.4	ft msl
pH	5.6	5.2	pH
Sp. conductance	620	660	µS/cm
Water temperature	21.1	19.0	°C
Alkalinity as CaCO ₃	2	5	mg/L
Turbidity	1	2	NTU
Volumes purged	2.4	2.6	well volume
Sampling code			
Synchronous water level	199.3 (09/10/97)	199.83 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	1.7	1	JE			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	150	1				GE							µg/L
Cadmium, total recoverable	2.3	1	JEV			GE	1.7	1	JE			GE	µg/L
Chromium, total recoverable	0.84	1	JE			WA							µg/L
Cobalt, total recoverable	2.5	1	JE			GE							µg/L
Copper, total recoverable	3.4	1	JE			WA							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<0.72	1	V			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	34	1	V			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	68,000	40	V	■		GE	64,000	40	V	■		GE	µg/L
Selenium, total recoverable	1.8	1	JE			GE							µg/L
Silver, total recoverable	1.5	1	JE			GE							µg/L
Thallium, total recoverable	5.9	1	JE	■		WA							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	630	1				GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<7.8	1	VY			WA							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	86	1		■		WA							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB110C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>-7.3E-02</i>	1	UJI			GP	pCi/L							
Cesium-137	<i>4.3E-01</i>	1	UI			GP	pCi/L							
Cobalt-60	<i>-4.3E-01</i>	1	UI			TM	pCi/L							
Curium-242	<i>3.4E-02</i>	1	UI			GP	pCi/L							
Curium-243/244	<i>-7.3E-02</i>	1	UI			GP	pCi/L							
Curium-245/246	<i>-3.8E-02</i>	1	UI			GP	pCi/L							
Gross alpha	6.0E+00	1				GP	pCi/L	6.1E+00	1	J			GP	pCi/L
Iodine-129	1.1E+01	1	J			GP	pCi/L							
Nonvolatile beta	6.4E+01	1		■		GP	pCi/L	5.9E+01	1		■		GP	pCi/L
Plutonium-238	<i>5.0E-02</i>	1	UI			TM	pCi/L							
Plutonium-239/240	<i>0.0E+00</i>	1	UI			TM	pCi/L							
Radium-226	1.6E+00	1				GP	pCi/L							
Radium-228	5.2E+00	1		■		TM	pCi/L							
Strontium-90	8.5E+00	1		■		GP	pCi/L							
Technetium-99	1.7E+02	1		■		TM	pCi/L							
Thorium-228	<i>6.0E-02</i>	1	UI			TM	pCi/L							
Thorium-230	<i>8.8E-02</i>	1	UI			GP	pCi/L							
Thorium-232	<i>2.0E-03</i>	1	UI			GP	pCi/L							
Total alpha emitters														
Total beta emitters	2.0E+02			■			pCi/L							
Total radium (Ra-226 plus Ra-228)	6.8E+00			■			pCi/L							
Tritium	1.6E+03	1		■		GP	pCi/mL	1.4E+03	1		■		GP	pCi/mL
Uranium-233/234	<i>0.0E+00</i>	1	UI			GP	pCi/L							
Uranium-235	<i>0.0E+00</i>	1	UJI			TM	pCi/L							
Uranium-238	<i>-6.4E-02</i>	1	UI			GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB110D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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	07/08/97	10/09/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	203.9	203.5	ft msl
pH	3.2	3.2	pH
Sp. conductance	1000	1060	µS/cm
Water temperature	21.8	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.3	2.5	well volume
Sampling code			
Synchronous water level	203.7 (09/10/97)	203.9 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	180	1	V			GE							µg/L
Cadmium, total recoverable	5.0	1	JE			GE	5.0	1	V	■		GE	µg/L
Chromium, total recoverable	3.9	1	JE			GE							µg/L
Cobalt, total recoverable	13	1		■		GE							µg/L
Copper, total recoverable	140	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	38	1		■		GE	12	1	V			GE	µg/L
Mercury, total recoverable	0.48	1				GE							µg/L
Nickel, total recoverable	20	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	140,000	200		■		GE	120,000	400		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<1.1	1	V			GE							µg/L
Thallium, total recoverable	2.8	1	JE	■		GE							µg/L
Vanadium, total recoverable	0.54	1	JE			GE							µg/L
Zinc, total recoverable	110	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB110D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.4E+01	1		■		GP	pCi/L
Cesium-137	-1.9E+00	1	UJI			GP	pCi/L
Cobalt-60	3.3E-01	1	UI			GP	pCi/L
Curium-242	2.9E-02	1	UI			GP	pCi/L
Curium-243/244	3.5E+01	1		■		GP	pCi/L
Curium-245/246	3.0E-01	1	R4			GP	pCi/L
Gross alpha	7.9E+02	1		■		GP	pCi/L
Iodine-129	7.1E+02	1		■		GP	pCi/L
Nonvolatile beta	9.7E+02	1		■		GP	pCi/L
Plutonium-238	1.9E-02	1	UJI			GP	pCi/L
Plutonium-239/240	-7.6E-03	1	UI			GP	pCi/L
Radium-226	1.5E+01	1	V	■		GP	pCi/L
Radium-228	6.4E+01	1		■		GP	pCi/L
Strontium-90	3.9E+02	1		■		GP	pCi/L
Technetium-99	2.0E+02	1	J	■		GP	pCi/L
Thorium-228	4.7E-01	1	UI			GP	pCi/L
Thorium-230	7.7E-01	1	UIV			GP	pCi/L
Thorium-232	1.9E-01	1				GP	pCi/L
Total alpha emitters	6.7E+02			■			pCi/L
Total beta emitters	1.4E+03			■			pCi/L
Total radium							pCi/L
(Ra-226 plus Ra-228)	7.8E+01			■			pCi/L
Tritium	5.9E+03	1		■		GP	pCi/mL
Uranium-233/234	1.2E+02	1		■		GP	pCi/L
Uranium-235	1.7E+01	1		■		GP	pCi/L
Uranium-238	4.8E+02	1		■		GP	pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB111C

<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>
N75383.3 E51526.3	33.276569 °N 81.677550 °W	169.0-159.0 ft msl	276.3 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/02/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	210.3	209.7	ft msl
pH	5.2	4.8	pH
Sp. conductance	50	54	µS/cm
Water temperature	20.9	19.0	°C
Alkalinity as CaCO ₃	7	0	mg/L
Turbidity	1	1	NTU
Volumes purged	3.1	6.9	well volume
Sampling code			
Synchronous water level	210.0 (09/10/97)	209.95 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,000	1				GE	2,000	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB111C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>5.1E-01</i>	1	UI			GP	<i>8.6E-01</i>	1	UJI			GP	pCi/L
Iodine-129													
Nonvolatile beta	<i>7.9E-01</i>	1	UI			GP	<i>8.5E-01</i>	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.5E+00	1				GP	4.8E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/02/97	10/02/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	213.3	213.0	ft msl
pH	4.8	4.8	pH
Sp. conductance	32	40	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	2.8	3.7	well volume
Sampling code			
Synchronous water level	213.2 (09/10/97)	223.03 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1	J			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	10	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	49	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	4.4	1	JE			GE	3.6	1	JE			GE	µg/L
Mercury, total recoverable	0.34	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,700	1				GE	1,800	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	39	1				GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	25	1		■		GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	4.8	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB111D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	9.1E-03	1	UI			GP	pCi/L
Cesium-137	-1.1E+00	1	UJI			GP	pCi/L
Cobalt-60	2.4E+00	1	UI			GP	pCi/L
Curium-242	-2.7E-02	1	UI			GP	pCi/L
Curium-243/244	5.4E-02	1	UI			GP	pCi/L
Curium-245/246	3.0E-02	1	UI			GP	pCi/L
Gross alpha	7.3E-01	1				GP	pCi/L
Iodine-129	2.1E-01	1	UI			GP	pCi/L
Nonvolatile beta	3.2E+00	1				GP	pCi/L
Plutonium-238	3.3E-01	1	UJIV			GP	pCi/L
Plutonium-239/240	2.4E-02	1	UI			GP	pCi/L
Radium-226	1.2E+00	1				GP	pCi/L
Radium-228	2.1E+00	1	UIV			GP	pCi/L
Strontium-90	1.4E+00	1				GP	pCi/L
Technetium-99	3.7E+01	1				GP	pCi/L
Thorium-228	5.0E-03	1	UI			GP	pCi/L
Thorium-230	3.8E-01	1	UIV			GP	pCi/L
Thorium-232	-1.3E-04	1	UI			GP	pCi/L
Total alpha emitters							
Total beta emitters	3.8E+01						pCi/L
Total radium							
(Ra-226 plus Ra-228)	1.2E+00						pCi/L
Tritium	8.7E+00	1				GP	pCi/mL
Uranium-233/234	1.1E-01	1	UI			GP	pCi/L
Uranium-235	9.5E-03	1	UI			GP	pCi/L
Uranium-238	3.8E-02	1	UI			GP	pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB112A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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	07/01/97	10/23/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	152.7	152.5	ft msl
pH	6.4	6.5	pH
Sp. conductance	160	190	µS/cm
Water temperature	20.2	19.3	°C
Alkalinity as CaCO ₃	52	37	mg/L
Turbidity	5	1	NTU
Volumes purged	4.2	2.1	well volume
Sampling code			
Synchronous water level	152.4 (09/10/97)	152.85 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	39	1				GE							µg/L
Cadmium, total recoverable	<5.0	1	J			GE	0.29	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,600	1				GE	4,800	5				WA	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.70	1	JE			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<8.2	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1	J			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB112A (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.3E-02	1	UI			GP							pCi/L
Cesium-137	-7.8E-01	1	UJI			GP							pCi/L
Cobalt-60	-2.2E-02	1	UI			GP							pCi/L
Curium-242	-1.1E-02	1	UI			GP							pCi/L
Curium-243/244	4.3E-02	1	UI			GP							pCi/L
Curium-245/246	3.2E-02	1	UI			GP							pCi/L
Gross alpha	5.9E-01	1	UI			GP	2.1E+00	1				TM	pCi/L
Iodine-129	9.4E-01	1	R4			GP							pCi/L
Nonvolatile beta	8.4E+00	1				GP	1.9E+01	1				GP	pCi/L
Plutonium-238	1.0E-01	1	UJI			GP							pCi/L
Plutonium-239/240	3.5E-02	1	UI			GP							pCi/L
Radium-226	3.8E-01	1	UI			GP							pCi/L
Radium-228	6.5E-01	1				GP							pCi/L
Strontium-90	5.1E+00	1				GP							pCi/L
Technetium-99	-4.7E+00	1	UI			GP							pCi/L
Thorium-228	-4.0E-02	1	UI			GP							pCi/L
Thorium-230	4.2E-01	1	UIV			GP							pCi/L
Thorium-232	-3.0E-04	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	5.8E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	6.5E-01												pCi/L
Tritium	4.3E+01	1		■		GP	1.2E+02	1		■		TM	pCi/mL
Uranium-233/234	9.8E-02	1	UI			GP							pCi/L
Uranium-235	1.2E-02	1	UI			GP							pCi/L
Uranium-238	4.2E-02	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB112C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74227.5 E48794.8	33.269556 °N 81.682496 °W	139.1-129.1 ft msl	229.1 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE 07/07/97 10/13/97

FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	199.9	199.4	ft msl
pH	4.0	3.8	pH
Sp. conductance	1060	1080	µS/cm
Water temperature	21.1	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	7	5	NTU
Volumes purged	2.4	2.3	well volume
Sampling code			
Synchronous water level	199.6 (09/10/97)	200.1 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	720	1	V			GE							µg/L
Cadmium, total recoverable	50	1		■		GE	2.1	1	JE			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	8.6	1		■		GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.3	1	JE			GE	2.4	1	JE			GE	µg/L
Mercury, total recoverable	0.51	1				GE							µg/L
Nickel, total recoverable	2.6	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	220,000	200	V	■		GE	89,000	80		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	130	10	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB112C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	4.3E-02	1	UI			GP							pCi/L
Cesium-137	-2.6E+00	1	UJI			GP							pCi/L
Cobalt-60	7.1E+00	1	R4			GP							pCi/L
Curium-242	-6.5E-02	1	UI			GP							pCi/L
Curium-243/244	1.8E-01	1	UI			GP							pCi/L
Curium-245/246	3.0E-02	1	UI			GP							pCi/L
Gross alpha	2.3E+02	1		■		GP	3.1E+01	1		■		GP	pCi/L
Iodine-129	1.0E+02	1		■		GP							pCi/L
Nonvolatile beta	1.9E+03	1		■		GP	9.2E+01	1		■		GP	pCi/L
Plutonium-238	8.1E-02	1	UJI			GP							pCi/L
Plutonium-239/240	5.0E-03	1	UI			GP							pCi/L
Radium-226	1.1E+02	1		■		GP							pCi/L
Radium-228	9.5E+01	1		■		GP							pCi/L
Strontium-90	7.7E+02	1		■		GP							pCi/L
Technetium-99	3.0E+02	1	J	■		GP							pCi/L
Thorium-228	1.9E-01	1	UI			GP							pCi/L
Thorium-230	3.8E-01	1	UIV			GP							pCi/L
Thorium-232	1.6E-01	1	UI			GP							pCi/L
Total alpha emitters	7.0E+00												pCi/L
Total beta emitters	1.3E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	2.0E+02			■									pCi/L
Tritium	6.8E+03	1		■		GP	2.3E+03	1		■		GP	pCi/mL
Uranium-233/234	3.5E+00	1				GP							pCi/L
Uranium-235	1.5E-01	1				GP							pCi/L
Uranium-238	3.3E+00	1				GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 07/07/97 10/13/97

FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	203.8	203.3	ft msl
pH	3.4	3.6	pH
Sp. conductance	420	440	µS/cm
Water temperature	21.0	19.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	7.1	10	well volume
Sampling code			
Synchronous water level	203.6 (09/10/97)	203.7 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	460	1	V			GE							µg/L
Cadmium, total recoverable	7.9	1		■		GE	6.1	1		■		GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	4.2	1	JE	■		GE							µg/L
Copper, total recoverable	10	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.0	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	3.0	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	48,000	40	V	■		GE	46,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	49	10	JEV			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB112D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	1.7E-01	1	UI			GP							pCi/L
Cesium-137	-5.0E-01	1	UJI			GP							pCi/L
Cobalt-60	1.7E+00	1	UI			GP							pCi/L
Curium-242	5.8E-03	1	UI			GP							pCi/L
Curium-243/244	3.1E-01	1				GP							pCi/L
Curium-245/246	3.0E-02	1	UI			GP							pCi/L
Gross alpha	2.2E+02	1		■		GP	1.1E+02	1		■		GP	pCi/L
Iodine-129	1.7E+01	1				GP							pCi/L
Nonvolatile beta	1.4E+03	1		■		GP	1.3E+03	1		■		GP	pCi/L
Plutonium-238	6.9E-02	1	UJI			GP							pCi/L
Plutonium-239/240	3.2E-02	1	UI			GP							pCi/L
Radium-226	5.8E+01	1		■		GP							pCi/L
Radium-228	5.7E+01	1		■		GP							pCi/L
Strontium-90	6.5E+02	1		■		GP							pCi/L
Technetium-99	8.9E+00	1	UJI			GP							pCi/L
Thorium-228	3.2E-01	1	UI			GP							pCi/L
Thorium-230	1.3E-01	1	UI			GP							pCi/L
Thorium-232	-4.1E-02	1	UI			GP							pCi/L
Total alpha emitters	1.4E+01												pCi/L
Total beta emitters	7.2E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.2E+02			■									pCi/L
Tritium	1.1E+03	1		■		GP	1.1E+03	1		■		GP	pCi/mL
Uranium-233/234	8.0E+00	1				GP							pCi/L
Uranium-235	3.8E-01	1				GP							pCi/L
Uranium-238	5.7E+00	1				GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB113A

<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>
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	07/01/97	10/10/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	158.8	158.0	ft msl
pH	11.6	11.0	pH
Sp. conductance	2000	2000	µS/cm
Water temperature	20.5	24.0	°C
Alkalinity as CaCO ₃	478	323	mg/L
Turbidity	2	2	NTU
Volumes purged	0.0	0.040	well volume
Sampling code	XN	XN	
Synchronous water level	158.8 (09/10/97)	158.82 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1	J			GE	<0.30	1	V			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<3.6	1	V			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,700	3				GE	3,600	10				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB113A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	4.2E+00	1				GP	4.6E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	7.1E+00	1				GP	6.8E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.2E+02	1		■		GP	8.5E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB1)

SAMPLE DATE	07/01/97	10/10/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	201.3	200.8	ft msl
pH	9.2	9.2	pH
Sp. conductance	120	160	µS/cm
Water temperature	20.2	23.0	°C
Alkalinity as CaCO ₃	37	115	mg/L
Turbidity	6	7	NTU
Volumes purged	0.0	0.033	well volume
Sampling code	XN	XN	
Synchronous water level	200.9 (09/10/97)	201.62 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1	J			GE	<0.24	1	V			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	1.2	1	JE			GE	<1.2	1	V			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	5,300	5				GE	4,200	10				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB113C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.1E+00	1				GP	1.6E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	2.3E+00	1				GP	2.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.1E+01	1		■		GP	6.3E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/01/97	10/10/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	205.4	204.9	ft msl
pH	4.6	4.6	pH
Sp. conductance	26	30	µS/cm
Water temperature	19.5	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	4	3	NTU
Volumes purged	11	6.8	well volume
Sampling code			
Synchronous water level	205.0 (09/10/97)	205.95 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1	J			GE	<0.39	1	V			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	2.0	1	JE			GE	<3.0	1	V			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	780	1				GE	730	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB113D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	8.0E-01	1				GP	1.2E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	5.7E-01	1	UI			GP	8.8E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	8.0E+00	1				GP	7.9E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB114A

<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>
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	07/01/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	154.9	154.7	ft msl
pH	7.2	6.6	pH
Sp. conductance	180	200	µS/cm
Water temperature	20.7	18.0	°C
Alkalinity as CaCO ₃	88	42	mg/L
Turbidity	4	2	NTU
Volumes purged	2.3	4.2	well volume
Sampling code			
Synchronous water level	154.7 (09/10/97)	155.07 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.29	1	JE			GE	0.36	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	1.4	1	JE			GE	0.84	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,000	2	JV3			GE	2,000	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB114A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.1E+00	1				GP	1.4E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	1.1E+00	1	UI			GP	1.1E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.7E-01	1				GP	8.7E-01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB114C

<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>
N75288.5 E52033.8	33.277188 °N 81.676030 °W	168.0-158.0 ft msl	252.2 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/01/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	211.2	210.8	ft msl
pH	5.8	5.0	pH
Sp. conductance	84	50	µS/cm
Water temperature	20.9	18.0	°C
Alkalinity as CaCO ₃	22	1	mg/L
Turbidity	9	3	NTU
Volumes purged	0.0	4.1	well volume
Sampling code	XN		
Synchronous water level	211.0 (09/10/97)	210.95 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable	23	1				GE							µg/L
Cadmium, total recoverable	0.21	1	JE			GE	0.31	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	11	5	JE			GE	2.7	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,300	3				GE	1,800	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB114C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.8E+00	1				GP	<i>5.4E-01</i>	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	1.1E+00	1				GP	<i>1.3E+00</i>	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.1E+00	1				GP	3.2E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/01/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	214.5	213.9	ft msl
pH	4.8	4.4	pH
Sp. conductance	40	42	µS/cm
Water temperature	20.9	18.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	1	NTU
Volumes purged	12	7.2	well volume
Sampling code			
Synchronous water level	214.2 (09/10/97)	214.22 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.46	1	JE			GE	0.47	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	2.9	1	JE			GE	5.4	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,700	1	V			GE	1,800	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB114D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>-5.9E-02</i>	1	UI			GP	1.7E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	1.9E+00	1				GP	1.3E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.8E+00	1				GP	5.5E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	33.267306 °N 81.676692 °W	173.8-163.8 ft msl	207.8 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/10/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	185.1	184.0	ft msl
pH	4.8	5.2	pH
Sp. conductance	20	180	µS/cm
Water temperature	20.0	20.0	°C
Alkalinity as CaCO ₃	2	1	mg/L
Turbidity	3	17	NTU
Volumes purged	2.2	0.0	well volume
Sampling code		XN	
Synchronous water level	184.0 (09/10/97)	184.8 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<1.1	1	V			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	4.4	1	JEV			GE	120	1		■		GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	460	1	V			GE	200	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB115C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>4.8E-01</i>	1	UI			GP	2.3E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	1.2E+00	1				GP	1.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.7E+00	1				GP	7.2E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB115D

<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>
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	07/15/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	190.7	190.0	ft msl
pH	4.2	6.8	pH
Sp. conductance	20	340	µS/cm
Water temperature	26.8	20.0	°C
Alkalinity as CaCO ₃	0		mg/L
Turbidity	20	9	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	190.1 (09/10/97)	190.8 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	33	1	J	■		GE	6.5	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<140	1	V			GE	450	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB115D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.0E+00	1				GP	1.1E-01	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	1.3E+00	1	UI			GP	5.6E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.2E+00	1				GP	6.9E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB116C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72725.5 E50645.9	33.269255 °N 81.674705 °W	170.5-160.5 ft msl	202.5 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/10/97	10/14/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	189.2	188.3	ft msl
pH	4.4	4.4	pH
Sp. conductance	22	24	µS/cm
Water temperature	20.4	20.0	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	8	3	NTU
Volumes purged	0.0	4.3	well volume
Sampling code	XN		
Synchronous water level	188.4 (09/10/97)	189.08 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<0.37	1	V			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<1.7	1	V			GE	2.7	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	860	1	V			GE	750	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB116C (cont.)

Radioactive Constituents

Parameter	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.0E+00	1				GP	7.1E-01	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	8.8E-01	1	UI			GP	8.8E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.0E+01	1				GP	9.5E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB116D

<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>					
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		07/15/97				10/15/97								
FIELD DATA														
<u>Parameter</u>		<u>3Q97</u>				<u>4Q97</u>				<u>Unit</u>				
Water elevation		191.4				190.5				ft msl				
pH		4.6				4.8				pH				
Sp. conductance		22				64				µS/cm				
Water temperature		24.4				19.0				°C				
Alkalinity as CaCO ₃		0				0				mg/L				
Turbidity		19				40				NTU				
Volumes purged		0.0				0.0				well volume				
Sampling code		XN				XN								
Synchronous water level		190.4 (09/10/97)				191.52 (12/15/97)				ft msl				
ANALYTICAL DATA														
<i>Inorganic Constituents</i>														
<u>Parameter</u>		<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable														
Arsenic, total recoverable														
Barium, total recoverable														
Cadmium, total recoverable		<5.0	1				GE	<0.42	1	V			GE	µg/L
Chromium, total recoverable														
Cobalt, total recoverable														
Copper, total recoverable														
Cyanide														
Lead, total recoverable		35	1	J	■		GE	33	1		■		GE	µg/L
Mercury, total recoverable														
Nickel, total recoverable														
Nitrate as nitrogen														
Nitrate-nitrite as nitrogen		<60	1	V			GE	<80	1	V			GE	µg/L
Selenium, total recoverable														
Silver, total recoverable														
Thallium, total recoverable														
Vanadium, total recoverable														
Zinc, total recoverable														
<i>Organic Constituents</i>														
<u>Parameter</u>		<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene														
Bis(2-ethylhexyl) phthalate														
Dichloromethane														
Phenols														
Tetrachloroethylene														
Trichloroethylene														
Trichlorofluoromethane														

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB116D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.3E+00	1				GP	3.3E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	9.7E-01	1	UI			GP	2.6E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	8.4E+00	1				GP	8.2E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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)

SAMPLE DATE	07/02/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	203.4	202.9	ft msl
pH	3.4	3.4	pH
Sp. conductance	540	620	µS/cm
Water temperature	21.3	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	9.3	6.9	well volume
Sampling code			
Synchronous water level	203.1 (09/10/97)	203.45 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	4.7	1	JE			GE	5.6	1	V	■		GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<0.86	1	V			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	62,000	40		■		GE	66,000	40		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB117D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	7.9E+02	1		■		GP	1.1E+03	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	8.7E+02	1		■		GP	1.1E+03	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.0E+03	1		■		GP	2.2E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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	07/09/97	10/21/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	209.4	209.0	ft msl
pH	4.6	4.6	pH
Sp. conductance	26	30	µS/cm
Water temperature	19.8	19.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	2	NTU
Volumes purged	4.2	4.8	well volume
Sampling code			
Synchronous water level	209.2 (09/10/97)	209.25 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	9.1	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable	2.2	1	JE			GE							µg/L
Cobalt, total recoverable	0.97	1	JE			GE							µg/L
Copper, total recoverable	21	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	3.6	1	JE			GE	3.2	1	JE			GE	µg/L
Mercury, total recoverable	0.12	1	JE			GE							µg/L
Nickel, total recoverable	4.5	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	990	1	V			GE	820	1	V			GE	µg/L
Selenium, total recoverable	1.7	1	JE			GE							µg/L
Silver, total recoverable	<1.5	1	V			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	61	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	2.7	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB118D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	7.9E-03	1	UI			GP							pCi/L
Cesium-137	-1.8E+00	1	UJI			GP							pCi/L
Cobalt-60	-1.4E+00	1	UI			GP							pCi/L
Curium-242	5.2E-04	1	UI			GP							pCi/L
Curium-243/244	8.4E-03	1	UI			GP							pCi/L
Curium-245/246	4.6E-02	1	UI			GP							pCi/L
Gross alpha	1.5E+00	1				GP	1.2E+00	1				GP	pCi/L
Iodine-129	8.7E-01	1	UJI			GP							pCi/L
Nonvolatile beta	2.3E+00	1				GP	8.3E-01	1	UI			GP	pCi/L
Plutonium-238	-4.9E-02	1	UI			GP							pCi/L
Plutonium-239/240	1.0E-02	1	UI			GP							pCi/L
Radium-226	4.6E-01	1				GP							pCi/L
Radium-228	3.2E+00	1	UIV			GP							pCi/L
Strontium-90	-7.6E-01	1	UJI			GP							pCi/L
Technetium-99	-8.7E+00	1	UI			GP							pCi/L
Thorium-228	8.3E-02	1	UI			GP							pCi/L
Thorium-230	6.5E-01	1	RV4			GP							pCi/L
Thorium-232	1.3E-01	1	R4			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Total radium (Ra-226 plus Ra-228)	4.6E-01												pCi/L
Tritium	7.3E+00	1				GP	7.5E+00	1				GP	pCi/mL
Uranium-233/234	6.3E-02	1	UI			GP							pCi/L
Uranium-235	7.2E-03	1	UI			GP							pCi/L
Uranium-238	6.2E-02	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB119D

<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>
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	07/08/97	10/07/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	206.3	206.0	ft msl
pH	3.8	3.6	pH
Sp. conductance	360	500	µS/cm
Water temperature	20.1	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	31	38	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	206.1 (09/10/97)	206.05 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	4.5	1	JE			GE	5.6	1		■		GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	9.6	1				GE	10	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	100,000	120		■		GE	100,000	120		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB119D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+03	1		■		GP	7.6E+02	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	9.1E+02	1		■		GP	6.4E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.6E+03	1		■		GP	4.9E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/15/97	10/15/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	155.1	162.0	ft msl
pH	11.8	11.0	pH
Sp. conductance	2200	2080	µS/cm
Water temperature	20.8	20.0	°C
Alkalinity as CaCO ₃	579	454	mg/L
Turbidity	3	3	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	157.0 (09/10/97)	165.65 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	130	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<0.21	1	V			GE	µg/L
Chromium, total recoverable	1.9	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	6.3	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	3.2	1	JE			GE	12	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	18,000	10	V	■		GE	19,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	2.5	1	JE			GE							µg/L
Zinc, total recoverable	<9.8	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	3.4	1	JE	■		GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	3.9	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB120A (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	7.6E-02	1	UI			GP							pCi/L
Cesium-137	1.9E-01	1	UI			GP							pCi/L
Cobalt-60	-3.3E-01	1	UI			GP							pCi/L
Curium-242	-2.9E-02	1	UI			GP							pCi/L
Curium-243/244	4.9E-02	1	UI			GP							pCi/L
Curium-245/246	3.3E-02	1	UI			GP							pCi/L
Gross alpha	2.5E+00	1				GP	2.5E+00	1				GP	pCi/L
Iodine-129	6.7E+00	1	J			GP							pCi/L
Nonvolatile beta	2.3E+01	1				GP	2.1E+01	1				GP	pCi/L
Plutonium-238	1.1E+00	1	J			GP							pCi/L
Plutonium-239/240	1.1E-01	1	UI			GP							pCi/L
Radium-226	1.6E+00	1				GP							pCi/L
Radium-228	3.5E+00	1				GP							pCi/L
Strontium-90	-1.1E-01	1	UJI			GP							pCi/L
Technetium-99	1.1E+01	1	UI			GP							pCi/L
Thorium-228	-8.2E-02	1	UI			GP							pCi/L
Thorium-230	5.2E-02	1	UI			GP							pCi/L
Thorium-232	-6.8E-03	1	UI			GP							pCi/L
Total alpha emitters	1.1E+00												pCi/L
Total beta emitters	1.0E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	5.0E+00			■									pCi/L
Tritium	4.2E+02	1		■		GP	4.9E+02	1		■		GP	pCi/mL
Uranium-233/234	3.3E-02	1	UI			GP							pCi/L
Uranium-235	-6.1E-03	1	UI			GP							pCi/L
Uranium-238	1.9E-02	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB120C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75549.8 E49171.1	33.273094 °N 81.684074 °W	160.7-150.7 ft msl	279.7 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/15/97	10/15/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	203.9	203.4	ft msl
pH	5.8	5.8	pH
Sp. conductance	260	300	µS/cm
Water temperature	20.5	19.0	°C
Alkalinity as CaCO ₃	10	7	mg/L
Turbidity	1	2	NTU
Volumes purged	3.2	2.9	well volume
Sampling code			
Synchronous water level	203.7 (09/10/97)	253.4 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	84	1				GE							µg/L
Cadmium, total recoverable	0.54	1	JE			GE	<0.99	1	V			GE	µg/L
Chromium, total recoverable	1.1	1	JE			GE							µg/L
Cobalt, total recoverable	4.4	1	JE	■		GE							µg/L
Copper, total recoverable	4.1	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1	J			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	5.1	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	29,000	40	V	■		GE	28,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<19	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB120C (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.7E-02	1	UI			GP	pCi/L							
Cesium-137	-2.1E+00	1	UI			GP	pCi/L							
Cobalt-60	-9.6E-02	1	UI			GP	pCi/L							
Curium-242	4.1E-02	1	UI			GP	pCi/L							
Curium-243/244	8.3E-02	1	UI			GP	pCi/L							
Curium-245/246	-5.3E-03	1	UI			GP	pCi/L							
Gross alpha	1.7E+01	1		■		GP	pCi/L	1.5E+01	1				GP	pCi/L
Iodine-129	8.4E+00	1	J			GP	pCi/L							
Nonvolatile beta	3.4E+01	1				GP	pCi/L	3.1E+01	1				GP	pCi/L
Plutonium-238	3.8E-02	1	UJI			GP	pCi/L							
Plutonium-239/240	3.1E-02	1	UJI3			GP	pCi/L							
Radium-226	4.5E+00	1				GP	pCi/L							
Radium-228	2.9E+00	1				GP	pCi/L							
Strontium-90	-4.3E-01	1	UJI			GP	pCi/L							
Technetium-99	5.7E+01	1		■		GP	pCi/L							
Thorium-228	1.2E-02	1	UI			GP	pCi/L							
Thorium-230	9.5E-01	1	R4			GP	pCi/L							
Thorium-232	6.9E-02	1	UI			GP	pCi/L							
Total alpha emitters														
Total beta emitters	6.8E+01			■			pCi/L							
Total radium														
(Ra-226 plus Ra-228)	7.4E+00			■			pCi/L							
Tritium	7.2E+02	1		■		GP	pCi/mL	6.9E+02	1		■		GP	pCi/mL
Uranium-233/234	7.7E-02	1	UI			GP	pCi/L							
Uranium-235	-5.1E-03	1	UI			GP	pCi/L							
Uranium-238	-5.1E-03	1	UI			GP	pCi/L							

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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	07/18/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	207.1	206.7	ft msl
pH	6.2	3.8	pH
Sp. conductance	50	220	µS/cm
Water temperature	23.9	20.0	°C
Alkalinity as CaCO ₃	24	0	mg/L
Turbidity	6	9	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	207.0 (09/10/97)	206.5 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	48	1	V			GE							µg/L
Cadmium, total recoverable	<0.22	1	V			GE	<5.0	1				GE	µg/L
Chromium, total recoverable	2.2	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	17	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	4.0	1	JE			GE	13	1				GE	µg/L
Mercury, total recoverable	<0.20	1				GE							µg/L
Nickel, total recoverable	5.3	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<140	1	V			GE	160	1	V			GE	µg/L
Selenium, total recoverable	12	5	JEV			GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.47	1	JE			GE							µg/L
Zinc, total recoverable	47	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB120D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	3.9E-02	1	UI			GP							pCi/L
Cesium-137	6.4E-01	1	UJI			GP							pCi/L
Cobalt-60	7.6E-01	1	UI			GP							pCi/L
Curium-242	2.5E-02	1	UI			GP							pCi/L
Curium-243/244	1.2E-02	1	UI			GP							pCi/L
Curium-245/246	9.3E-03	1	UI			GP							pCi/L
Gross alpha	1.7E+00	1				GP	1.2E+00	1				GP	pCi/L
Iodine-129	1.5E-01	1	UJI			GP							pCi/L
Nonvolatile beta	1.5E+00	1				GP	9.5E-01	1	UI			GP	pCi/L
Plutonium-238	4.9E-02	1	UJI			GP							pCi/L
Plutonium-239/240	1.5E-02	1	UI			GP							pCi/L
Radium-226	1.0E+00	1				GP							pCi/L
Radium-228	4.0E+00	1				GP							pCi/L
Strontium-90	4.4E-01	1	UI			GP							pCi/L
Technetium-99	3.4E+00	1	UI			GP							pCi/L
Thorium-228	2.6E-01	1	UI			GP							pCi/L
Thorium-230	2.6E-01	1	UI			GP							pCi/L
Thorium-232	4.2E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	4.0E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	5.1E+00			■									pCi/L
Tritium	1.0E+01	1				GP	1.1E+01	1				GP	pCi/mL
Uranium-233/234	3.2E-01	1	UI			GP							pCi/L
Uranium-235	2.9E-01	1	UI			GP							pCi/L
Uranium-238	6.4E-02	1	UI			GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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 (IIB1)

SAMPLE DATE	07/08/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	202.1	201.6	ft msl
pH	5.6	5.0	pH
Sp. conductance	54	52	µS/cm
Water temperature	19.7	18.0	°C
Alkalinity as CaCO ₃	16	0	mg/L
Turbidity	1	2	NTU
Volumes purged	3.0	6.0	well volume
Sampling code			
Synchronous water level	201.9 (09/10/97)	201.62 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.58	1	JE			GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	8.4	1				GE	3.8	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,700	3				GE	7,300	6	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB121C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.1E+00	1				GP	1.5E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	5.1E+00	1				GP	2.2E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.3E+02	1	V	■		GP	1.3E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/08/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	204.8	204.3	ft msl
pH	5.8	4.2	pH
Sp. conductance	30	220	µS/cm
Water temperature	19.8	19.0	°C
Alkalinity as CaCO ₃	20	0	mg/L
Turbidity	20	4	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	204.6 (09/10/97)	204.05 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.63	1	JE			GE	<0.45	1	V			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	41	1		■		GE	17	1		■		GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	840	1				GE	690	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB121DR (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.3E+01	1				GP	1.0E+01	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	2.6E+01	1				GP	2.4E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.8E+01	1	V			GP	1.1E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	Bamwell (IIB1)

SAMPLE DATE	07/09/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	197.9	197.2	ft msl
pH	4.4	4.0	pH
Sp. conductance	680	790	µS/cm
Water temperature	19.7	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	4	NTU
Volumes purged	2.8	4.9	well volume
Sampling code			
Synchronous water level	197.3 (09/10/97)	198.05 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	2.0	1	JE			GE	27	5		■		GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	1.3	1	JE			GE	<25	5				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	87,000	40	V	■		GE	210,000	200	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB122C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.4E+01	1		■		GP	1.9E+02	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	8.1E+01	1		■		GP	1.9E+03	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.2E+03	1		■		GP	7.1E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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	07/09/97	10/14/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	201.2	200.6	ft msl
pH	4.6	4.8	pH
Sp. conductance	140	200	µS/cm
Water temperature	18.4	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	7.1	6.6	well volume
Sampling code			
Synchronous water level	200.8 (09/10/97)	201.9 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	58	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE	<0.48	1	V			GE	µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	2.0	1	JE			GE							µg/L
Copper, total recoverable	1.9	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.3	1	JE			GE	1.4	1	JE			GE	µg/L
Mercury, total recoverable	0.14	1	JE			GE							µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	13,000	20	V	■		GE	16,000	10	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<1.3	1	V			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<20	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Phenols	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB122D (cont.)

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	7.2E-02	1	UI			GP							pCi/L
Cesium-137	1.1E-01	1	UI			GP							pCi/L
Cobalt-60	-1.1E-01	1	UI			GP							pCi/L
Curium-242	-4.1E-02	1	UI			GP							pCi/L
Curium-243/244	5.5E-02	1	UI			GP							pCi/L
Curium-245/246	2.3E-02	1	UI			GP							pCi/L
Gross alpha	3.1E+00	1				GP	5.7E+00	1				GP	pCi/L
Iodine-129	1.6E+00	1	R4			GP							pCi/L
Nonvolatile beta	9.9E+00	1				GP	2.6E+01	1				GP	pCi/L
Plutonium-238	1.5E-01	1	JV			GP							pCi/L
Plutonium-239/240	9.2E-03	1	UI			GP							pCi/L
Radium-226	2.3E+00	1	UIV			GP							pCi/L
Radium-228	3.9E+00	1				GP							pCi/L
Strontium-90	2.5E+00	1				GP							pCi/L
Technetium-99	2.5E+01	1	J			GP							pCi/L
Thorium-228	-5.8E-03	1	UI			GP							pCi/L
Thorium-230	4.8E-01	1	UIV			GP							pCi/L
Thorium-232	1.3E-02	1	UI			GP							pCi/L
Total alpha emitters	9.0E-01												pCi/L
Total beta emitters	3.2E+01												pCi/L
Total radium (Ra-226 plus Ra-228)	3.9E+00												pCi/L
Tritium	4.4E+02	1		■		GP	6.1E+02	1		■		GP	pCi/mL
Uranium-233/234	2.4E-01	1				GP							pCi/L
Uranium-235	5.1E-02	1	UI			GP							pCi/L
Uranium-238	5.0E-01	1				GP							pCi/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB1)

SAMPLE DATE	07/09/97	10/20/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	208.3	207.9	ft msl
pH	5.6	5.4	pH
Sp. conductance	58	68	µS/cm
Water temperature	20.0	19.0	°C
Alkalinity as CaCO ₃	9	5	mg/L
Turbidity	1	1	NTU
Volumes purged	2.8	3.9	well volume
Sampling code			
Synchronous water level	208.0 (09/10/97)	208.33 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,900	3	V			GE	2,800	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB123C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>6.5E-01</i>	1	UI			GP	<i>4.9E-01</i>	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	<i>6.1E-01</i>	1	UI			GP	<i>4.3E-01</i>	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.4E+00	1				GP	1.7E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB123D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 (IIB2)

SAMPLE DATE	07/09/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	209.9	209.3	ft msl
pH	4.6	4.2	pH
Sp. conductance	38	48	µS/cm
Water temperature	19.2	19.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	3.3	9.1	well volume
Sampling code			
Synchronous water level	209.6 (09/10/97)	210.1 (12/15/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.22	1	JE			GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	2.2	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,900	3	V			GE	2,000	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSB123D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.1E+00	1				GP	2.2E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	3.3E-01	1	UI			GP	1.1E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.9E+00	1				GP	8.1E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 1D

<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>
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	09/30/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	222.0	221.8	ft msl
pH	5.8	4.4	pH
Sp. conductance	42	44	µS/cm
Water temperature	20.0	20.0	°C
Alkalinity as CaCO ₃	4	0	mg/L
Turbidity	64.4	22	NTU
Volumes purged		0.0	well volume
Sampling code	XN		
Synchronous water level		221.75 (12/22/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.66	1	JE			GE	0.44	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	7.6	1				GE	13	1				GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,100	3	V			GE	2,200	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 1D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	7.6E+00	1				GP	5.6E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	5.2E+00	1				GP	3.0E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.5E+01	1				GP	1.4E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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 (IIB2)

<u>SAMPLE DATE</u>	07/16/97	10/24/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	222.9	222.5	ft msl
pH	5.8	5.0	pH
Sp. conductance	94	57	µS/cm
Water temperature	25.0	18.2	°C
Alkalinity as CaCO ₃	35	15	mg/L
Turbidity	16	50	NTU
Volumes purged	0.43	0.44	well volume
Sampling code	XN	XN	
Synchronous water level	222.6 (09/11/97)	222.4 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	30	1				GE							µg/L
Cadmium, total recoverable	<0.21	1	V			GE	0.39	1	JE			GE	µg/L
Chromium, total recoverable	<3.6	1	V			GE							µg/L
Cobalt, total recoverable	2.1	1	E			GE							µg/L
Copper, total recoverable	<3.4	1	V			GE							µg/L
Cyanide													
Lead, total recoverable	7.8	1	V			GE	38	1		■		GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable	<3.8	1	V			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,200	1	V			GE	920	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	1.4	1	E			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	0.97	1	E			GE							µg/L
Zinc, total recoverable	7.7	1				GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 2D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	8.3E-01	1	UI			GP	6.6E-01	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	2.5E+00	1				GP	3.5E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.4E+00	1				GP	6.9E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB2)

SAMPLE DATE	07/16/97	10/24/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.1	219.7	ft msl
pH	5.8	6.1	pH
Sp. conductance	92	85	µS/cm
Water temperature	27.0	25.3	°C
Alkalinity as CaCO ₃	38		mg/L
Turbidity	19	154	NTU
Volumes purged	1.3	5.3	well volume
Sampling code	XN		
Synchronous water level	219.8 (09/11/97)	219.5 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	<5.0	1				GE	<5.0	1				GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	9.3	1	V			GE	13	1	J			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,600	1	V			GE	1,500	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 3D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.4E+00	1				GP	4.9E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	3.0E+00	1				GP	5.5E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.7E+01	1				GP	2.8E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 4D

<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>
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	07/15/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	216.8	213.9	ft msl
pH	5.4		pH
Sp. conductance	38		µS/cm
Water temperature	29.0		°C
Alkalinity as CaCO ₃	7		mg/L
Turbidity	2		NTU
Volumes purged	2.4	0.0	well volume
Sampling code		DN	
Synchronous water level	214.1 (09/11/97)	213.75 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	8.2	1				GE							µg/L
Cadmium, total recoverable	0.21	1	JE			GE							µg/L
Chromium, total recoverable	5.8	1				GE							µg/L
Cobalt, total recoverable	1.4	1	JE			GE							µg/L
Copper, total recoverable	5.1	1				GE							µg/L
Cyanide													
Lead, total recoverable	220	1	J	■		GE							µg/L
Mercury, total recoverable													
Nickel, total recoverable	2.6	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,400	1	V			GE							µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<10	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 4D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.8E+00	1				GP							pCi/L
Iodine-129													
Nonvolatile beta	2.3E+00	1				GP							pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.1E+00	1				GP							pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 5D

<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>
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 (IIB2)

SAMPLE DATE	07/11/97	10/10/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	218.1	217.8	ft msl
pH	5.4	5.0	pH
Sp. conductance	300	300	µS/cm
Water temperature	24.2	22.0	°C
Alkalinity as CaCO ₃	19	19	mg/L
Turbidity	13	52	NTU
Volumes purged	0.0	0.0	well volume
Sampling code	XN	XN	
Synchronous water level	217.9 (09/11/97)	217.5 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	30	1	V			GE							µg/L
Cadmium, total recoverable	<0.47	1	V			GE	<0.50	1	V			GE	µg/L
Chromium, total recoverable	1.1	1	JE			GE							µg/L
Cobalt, total recoverable	4.1	1	JE	■		GE							µg/L
Copper, total recoverable	9.9	1				GE							µg/L
Cyanide													
Lead, total recoverable	6.7	1	V			GE	26	1	V	■		GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable	4.7	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	16,000	20	V	■		GE	23,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<1.9	1	JV			GE							µg/L
Thallium, total recoverable	<5.0	1				GE							µg/L
Vanadium, total recoverable	<1.2	1	EV			GE							µg/L
Zinc, total recoverable	<31	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 5D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.0E+01	1		■		GP	3.0E+01	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	8.9E+02	1		■		GP	5.3E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.9E+02	1		■		GP	3.3E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit .

● = 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	07/15/97	10/22/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	217.3	216.9	ft msl
pH	4.6	4.6	pH
Sp. conductance	140	140	µS/cm
Water temperature	24.0	18.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	8	2	NTU
Volumes purged	20	9.9	well volume
Sampling code			
Synchronous water level	217.1 (09/11/97)	216.75 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.29	1	JE			GE	0.29	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	0.87	1	JE			GE	2.2	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	12,000	10	V	■		GE	8,400	10	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 6D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.3E+00	1				GP	2.8E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	1.1E+01	1				GP	3.2E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.7E+02	1		■		GP	7.5E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 7D

<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>	
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 (IIB2)	
SAMPLE DATE		07/11/97		10/10/97			
FIELD DATA							
<u>Parameter</u>	<u>3Q97</u>				<u>4Q97</u>	<u>Unit</u>	
Water elevation	216.0				215.7	ft msl	
pH	4.8				4.6	pH	
Sp. conductance	460				420	µS/cm	
Water temperature	20.9				23.0	°C	
Alkalinity as CaCO ₃	1				0	mg/L	
Turbidity	9				16	NTU	
Volumes purged	0.0				0.0	well volume	
Sampling code	XN				XN		
Synchronous water level	215.8 (09/10/97)				215.4 (12/16/97)	ft msl	
ANALYTICAL DATA							
<i>Inorganic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable							
Arsenic, total recoverable							
Barium, total recoverable							
Cadmium, total recoverable	<0.78	1	V			GE	µg/L
Chromium, total recoverable							
Cobalt, total recoverable							
Copper, total recoverable							
Cyanide							
Lead, total recoverable	250	1	V	■		GE	µg/L
Mercury, total recoverable							
Nickel, total recoverable							
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen	42,000	40	V	■		GE	µg/L
Selenium, total recoverable							
Silver, total recoverable							
Thallium, total recoverable							
Vanadium, total recoverable							
Zinc, total recoverable							
<i>Organic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene							
Bis(2-ethylhexyl) phthalate							
Dichloromethane							
Phenols							
Tetrachloroethylene							
Trichloroethylene							
Trichlorofluoromethane							

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 7D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.5E+01	1		■		GP	2.3E+01	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	5.4E+01	1		■		GP	6.3E+01	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.5E+02	1		■		GP	7.6E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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 (IIB2)

SAMPLE DATE	07/15/97	10/22/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	215.2	214.8	ft msl
pH	4.6	4.8	pH
Sp. conductance	72	66	µS/cm
Water temperature	22.0	19.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	0	12	NTU
Volumes purged	6.3	19	well volume
Sampling code	NW		
Synchronous water level	215.1 (09/10/97)	214.8 (12/16/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.27	1	JE			GE	0.22	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	6.3	1	J			GE	1.7	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	5,600	5	V			GE	4,100	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 8D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.2E+00	1				GP	2.7E+00	1				GP	pCi/L
Iodine-129													
Nonvolatile beta	3.7E+00	1				GP	5.8E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.6E+01	1		■		GP	2.1E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 9D

<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>
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 (IIB2)

SAMPLE DATE	07/15/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	214.1	213.8	ft msl
pH	4.0	3.8	pH
Sp. conductance	180	240	µS/cm
Water temperature	22.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	2	NTU
Volumes purged	19	9.3	well volume
Sampling code			
Synchronous water level	214.0 (09/10/97)	213.9 (12/17/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable	0.50	1	JE			GE	0.97	1	JE			GE	µg/L
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable	1.2	1	JE			GE	1.6	1	JE			GE	µg/L
Mercury, total recoverable													
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	19,000	20	V	■		GE	21,000	20	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene													
Bis(2-ethylhexyl) phthalate													
Dichloromethane													
Phenols													
Tetrachloroethylene													
Trichloroethylene													
Trichlorofluoromethane													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL FSL 9D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.1E+02	1		■		GP	1.9E+02	1		■		GP	pCi/L
Iodine-129													
Nonvolatile beta	1.3E+02	1		■		GP	2.8E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	6.5E+02	1		■		GP	6.8E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = 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	07/08/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	169.0	168.3	ft msl
pH	6.4	6.5	pH
Sp. conductance	140	175	µS/cm
Water temperature	20.0	20.9	°C
Alkalinity as CaCO ₃	26	80	mg/L
Turbidity	0	0	NTU
Volumes purged	2.7	2.7	well volume
Sampling code			
Synchronous water level	168.0 (09/11/97)	168.7 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable							<4.6	1	V			GE	µg/L
Arsenic, total recoverable							<5.0	1				GE	µg/L
Barium, total recoverable							34	1	V			GE	µg/L
Cadmium, total recoverable	0.64	1	JE			WA	<5.0	1				GE	µg/L
Chromium, total recoverable							<3.5	1	V			GE	µg/L
Cobalt, total recoverable													
Copper, total recoverable							<6.3	1	V			GE	µg/L
Cyanide													
Lead, total recoverable	1.4	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	0.14	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable							<5.0	1				GE	µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	10	1	JE			GE	100	1	V			GE	µg/L
Selenium, total recoverable							<5.0	1				GE	µg/L
Silver, total recoverable							<5.0	1				GE	µg/L
Thallium, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable							2.9	1	JE			GE	µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene							<1.0	1				GE	µg/L
Bis(2-ethylhexyl) phthalate													
Dichloromethane							<1.0	1				GE	µg/L
Phenols							<5.0	1				GE	µg/L
Tetrachloroethylene							<1.0	1				GE	µg/L
Trichloroethylene							<1.0	1				GE	µg/L
Trichlorofluoromethane							<1.0	1				GE	µg/L

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL HSB 85A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Cesium-137													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.8E+00	1				TM	8.1E-01	1	UI			GP	pCi/L
Iodine-129													
Nonvolatile beta	3.9E+00	1				TM	1.2E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium, total alpha-emitting							2.0E-01	1	UJI			GP	pCi/L
Radium-226													
Radium-228													
Strontium-90							4.5E-02	1	UI			GP	pCi/L
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	-9.0E-02	1	UI			TM	-3.6E-011		UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

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Notes: Radionuclide results in italics are less than sample quantitation limit.

● = exceeded holding time

■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

Appendix D

Time Series Plots

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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

Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 5 µg/L

—■— FSB 91D (W)GWPS

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 93D

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 95CR

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.

GWPS 5 µg/L

—▲— FSB 95CR (B) - - - - - GWPS

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 FSB102C

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 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)

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

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.

GWPS 5 µg/L

—▲— FSB112C (B) - - - - - GWPS

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 FSB119D

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 FSB 76

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 15 µg/L

—■— FSB 76 (W) - - - - - GWPS

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 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 (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Lead Concentrations Well FSB 90D

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 94

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 FSB 95DR

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 97

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 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

—■— FSB 119DGWPS

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 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)

Tritium 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)

Tritium Activities Well Cluster FSB 99

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 FSB102C

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 FSB107

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 20 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)

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 (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 1997

Nitrate Concentrations Well Cluster FSB 87

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 FSB 88D

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 FSB 91D

Unconnected data points indicate intervals of dry wells or values below the detection limit.
GWPS 10,000 µg/L

—■— FSB 91D (W)GWPS

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 FSB102C

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 10,000 µg/L

—▲— FSB102C (B) - - - - - GWPS

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 FSB104

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 10,000 µg/L

—■— FSB104D (W) —▲— FSB104C (B) - - - - - GWPS

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 FSB110D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 10,000 µg/L

—■— FSB110D (W) - - - - - GWPS

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 FSB117D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 10,000 µg/L

—■— FSB117D (W)GWPS

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

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 10,000 µg/L

—■— FSB119D (W)GWPS

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 FSB120

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.

GWPS 10,000 µg/L

■ FSB120D (W) ▲ FSB120C (B) GWPS

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 (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Uranium-233/234 Activities 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)

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)

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

—■— FSB 94DR (W) —▲— FSB 94C (B) - - - - - Sum of alphas < 15 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)

Uranium-233/234 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-233/234 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)

Uranium-233/234 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)

Uranium-233/234 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)

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

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 79

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 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-238 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)

Uranium-238 Activities Well Cluster FSB 95

—■— FSB 95DR (W) —▲— FSB 95CR (B) - - - - - Sum of alphas < 15 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)

Uranium-238 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)

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)

Uranium-238 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)

Uranium-238 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)

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 (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 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)

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 (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 98

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 FSB102C

Note: W=Water Table (IIB2); B=Bamwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 (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 78

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 90

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 92

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 94

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 95

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 (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 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

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 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

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 FSB 77

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 79

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 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)

Gross Alpha 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)

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)

Gross Alpha 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)

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)

F-Area HWMF

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Third and Fourth Quarter 1997

Gross Alpha 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)

Nonvolatile Beta 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)

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

Note: W=Water Table (IIB2); B=Bamwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Nonvolatile Beta 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)

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)

Nonvolatile Beta 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)

Nonvolatile Beta 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)

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)

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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Hydrograph Well Cluster 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)

Hydrograph Well FSB 77

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 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)

Hydrograph Well Cluster FSB 87

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 88

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 89

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 90

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 91

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 92

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 93

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 94

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 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 (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph 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)

Hydrograph 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)

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

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 FSB101A

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 FSB102C

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 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=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well Cluster FSB105

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 FSB106

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 FSB107

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 FSB108D

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 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)

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 (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well Cluster FSB113

Note: W=Water Table (IIB2); B=Bamwell (IIB1); M=McBean (IIB1); 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)

Hydrograph Well Cluster FSB115

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 FSB116

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 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 (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well Cluster FSB121

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 FSB122

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 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)

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 (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well FSL 4D

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 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

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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 (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well FSL 8D

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 9D

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 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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Appendix F

Shewhart-CUSUM Charts

Non-Organics

AGTOT - Silver
ASTOT - Arsenic
BATOT - Barium
CDTOT - Cadmium
COTOT - Cobalt
CRTOT - Chromium
CUTOT - Copper
CYN - Cyanide
HGTOT - Mercury
NITOT - Nickel
NO3NO2 - Nitrate/Nitrite
PBTOT - Lead
SBTOT - Antimony
SETOT - Selenium
TLTOT - Thallium
VTOT - Vanadium
ZNTOT - Zinc

Organics

B2EHP - Bis (2-ethylhexyl) phthalate
C6H6 - Benzene
CCL3F - Trichlorofluoromethane
CH2CL2 - Methylene chloride
PHENOL - Phenols
TCLEE - Tetrachloroethylene
TRCLE - Trichloroethylene

Radionuclides

ALPHAG - Gross Alpha
AM241 - Americium-241
BETAG - Gross Beta (Nonvolatile Beta)
C14 - Carbon-14
CM242 - Curium-242
CM4344 - Curium-243/244
CM4546 - Curium-245/246
CO60 - Cobalt-60
CS137 - Cesium-137
I129 - Iodine-129
NI63 - Nickel-63
PU238 - Plutonium-238
PU3940 - Plutonium-239/240
RA226 - Radium-226
RA228 - Radium-228
SR90 - Strontium-90
TC99 - Technetium-99
TH228 - Thorium-228
TH230 - Thorium-230
TH232 - Thorium-232
TOTRAD - Total Radium
TRITIUM - Tritium
U235 - Uranium-235
U238 - Uranium-238
U3334 - Uranium-233/234

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 88C
W. Statistic = 0.90400

Analyte TRCLE
W. Quantile = 0.82500

Background Data Summary: Mean=0.269E+00 STD.DEV =0.749E+00No.Samps. = 14

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic = 0.92910

Analyte ALPHAG
W. Quantile = 0.85800

Background Data Summary: Mean=-.195E+01 STD.DEV =0.149E+01No.Samps. = 18

STD. Mean O

+CUSUM +

-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic =0.97610

Analyte CCL3F
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic =0.88010

Analyte CH2CL2
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic =0.93440

Analyte HGTOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic =0.91500

Analyte NITOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic = 0.94180

Analyte PBTOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic = 0.86330

Analyte RA226
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic =0.86830

Analyte SR90
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 88D
W. Statistic =0.92450

Analyte TRITIUM
W. Quantile =0.85800

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 89C
W. Statistic = 0.90000

Analyte BATOT
W. Quantile = 0.85100

Background Data Summary: Mean=0.118E+02 STD.DEV = 0.169E+01 No.Samps. = 17

Combined Shewhart-CUSUM Chart

Well FSB 89C
W. Statistic = 0.88630

Analyte CH₂CL₂
W. Quantile = 0.79200

Background Data Summary: Mean=0.163E+01 STD.DEV = 0.977E+00 No.Samps. = 11

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 89C
W. Statistic = 0.87010

Analyte TCLEE
W. Quantile = 0.81400

Combined Shewhart-CUSUM Chart

Well FSB 89C
W. Statistic = 0.92260

Analyte TRCLE
W. Quantile = 0.80500

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 89C
W. Statistic =0.92880

Analyte ZNTOT
W. Quantile =0.82500

Background Data Summary: Mean=0.187E+01 STD.DEV =0.618E+00 No.Samps. = 14

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic =0.94870

Analyte ALPHAG
W. Quantile =0.86300

Background Data Summary: Mean=0.151E+00 STD.DEV =0.954E-01 No.Samps. = 19

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic =0.92550

Analyte CCL3F
W. Quantile =0.79200

Background Data Summary: Mean=0.140E+01 STD.DEV =0.100E+01No.Samps. = 11

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic =0.88510

Analyte CDTOT
W. Quantile =0.78100

Background Data Summary: Mean=0.144E+01 STD.DEV =0.862E+00No.Samps. = 10

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 89D

W. Statistic = 0.90450

Analyte CUTOT

W. Quantile = 0.76400

Background Data Summary: Mean=0.199E+02 STD.DEV =0.736E+01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 89D

W. Statistic = 0.83150

Analyte I129

W. Quantile = 0.74900

Background Data Summary: Mean=-.230E+01 STD.DEV =0.724E+00 No.Samps. = 8

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic = 0.89020

Analyte RA228
W. Quantile = 0.76400

1Q96 1Q97 1Q98 1Q99 1Q00 1Q01 1Q02
Background Data Summary: Mean = -.448E+01 STD.DEV = 0.182E+01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic = 0.89290

Analyte U235
W. Quantile = 0.78100

1Q96 1Q97 1Q98 1Q99 1Q00 1Q01 1Q02
Background Data Summary: Mean = 0.480E-02 STD.DEV = 0.274E-02 No.Samps. = 10

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic = 0.89300

Analyte U238
W. Quantile = 0.79200

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic = 0.91890

Analyte U3334
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 89D
W. Statistic =0.94580

Analyte ZNTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.264E+02 STD.DEV =0.111E+02 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 90C
W. Statistic =0.90600

Analyte ALPHAG
W. Quantile =0.84400

Background Data Summary: Mean=0.300E-02 STD.DEV =0.155E-02 No.Samps. = 16

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 90C
W. Statistic = 0.83670

Analyte CO60
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 90C
W. Statistic = 0.87930

Analyte TC99
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.93750

Analyte ALPHAG
W. Quantile =0.86300

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.84830

Analyte AM241
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic = 0.89730

Analyte CDTOT
W. Quantile = 0.80500

Background Data Summary: Mean=0.618E+01 STD.DEV =0.187E+01No.Samps. = 12

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic = 0.83850

Analyte CM4344
W. Quantile =0.74900

Background Data Summary: Mean=0.575E-02 STD.DEV =0.337E-02 No.Samps. = 8

STD. Mean
+CUSUM
-CUSUM

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.91990

Analyte HGTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.101E+02 STD.DEV =0.437E+01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.89940

Analyte I129
W. Quantile =0.74900

Background Data Summary: Mean=0.195E+00 STD.DEV =0.657E-01 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.93290

Analyte RA228
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.85760

Analyte SR90
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.95370

Analyte U238
W. Quantile =0.78100

Background Data Summary: Mean=0.257E+00 STD.DEV =0.144E+00 No.Samps. = 10

Combined Shewhart-CUSUM Chart

Well FSB 90D
W. Statistic =0.87510

Analyte U3334
W. Quantile =0.76400

Background Data Summary: Mean=0.259E+00 STD.DEV =0.925E-01 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 91C
W. Statistic = 0.94610

Analyte BETAG
W. Quantile = 0.83500

Combined Shewhart-CUSUM Chart

Well FSB 91C
W. Statistic = 0.93340

Analyte CDTOT
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic =0.91830

Analyte CUTOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic =0.87410

Analyte HGTOT
W. Quantile =0.74900

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic =0.91200

Analyte I129
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic =0.89570

Analyte NITOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic = 0.96620

Analyte RA228
W. Quantile = 0.78100

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic = 0.95540

Analyte SR90
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic = 0.91910

Analyte TC99
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic = 0.89570

Analyte U235
W. Quantile = 0.79200

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 91D
W. Statistic =0.89600

Analyte ZNTOT
W. Quantile =0.74900

Background Data Summary: Mean=0.200E+02 STD.DEV =0.734E+01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 92C
W. Statistic =0.91000

Analyte ALPHAG
W. Quantile =0.74900

Background Data Summary: Mean=0.416E-01 STD.DEV =0.160E-01 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 92C
W. Statistic = 0.86480

Analyte BETAG
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.93550

Analyte ALPHAG
W. Quantile = 0.86300

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.86930

Analyte AM241
W. Quantile =0.78100

Background Data Summary: Mean=0.840E-02 STD.DEV =0.620E-02 No.Samps. = 10

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.85410

Analyte BATOT
W. Quantile =0.76400

Background Data Summary: Mean=0.424E+03 STD.DEV =0.148E+03 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.96350

Analyte BETAG
W. Quantile = 0.86300

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.89180

Analyte CDTOT
W. Quantile = 0.80500

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.84660

Analyte CM4344
W. Quantile =0.74900

Background Data Summary: Mean=0.688E-02 STD.DEV =0.479E-02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.83240

Analyte CUTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.327E+02 STD.DEV =0.287E+02 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.89160

Analyte HGTOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.85290

Analyte I129
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.93660

Analyte NITOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.89500

Analyte PBTOT
W. Quantile = 0.80500

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.89420

Analyte RA226
W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.82690

Analyte TC99
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

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Third and Fourth Quarter, 1997

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.95670

Analyte TRITIUM
W. Quantile =0.86300

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic =0.90390

Analyte U235
W. Quantile =0.76400

STD. Mean O

+CUSUM +

-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.95590

Analyte U238
W. Quantile = 0.78100

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.93650

Analyte U3334
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 92D
W. Statistic = 0.94460

Analyte ZNTOT
W. Quantile = 0.76400

Background Data Summary: Mean=0.924E+02 STD.DEV =0.130E+02 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic = 0.90240

Analyte ALPHAG
W. Quantile = 0.85100

Background Data Summary: Mean=-.520E+01 STD.DEV =0.308E+00 No.Samps. = 17

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic =0.94810

Analyte BATOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic =0.93160

Analyte BETAG
W. Quantile =0.86800

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic = 0.86380

Analyte CCL3F
W. Quantile = 0.79200

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic = 0.93450

Analyte I129
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic =0.90320

Analyte NITOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic =0.87110

Analyte RA228
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic =0.84950

Analyte TH230
W. Quantile =0.74900

Background Data Summary: Mean=0.100E-02 STD.DEV =0.760E-03 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic =0.90040

Analyte TRCLE
W. Quantile =0.78100

Background Data Summary: Mean=0.179E+01 STD.DEV =0.397E+00 No.Samps. = 10

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 93C
W. Statistic = 0.92550

Analyte ZNTOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic = 0.96120

Analyte ALPHAG
W. Quantile = 0.86300

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic = 0.96680

Analyte AM241
W. Quantile = 0.74900

Background Data Summary: Mean=0.738E-02 STD.DEV =0.307E-02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic = 0.92440

Analyte BATOT
W. Quantile = 0.76400

Background Data Summary: Mean=0.394E+03 STD.DEV =0.528E+02 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic =0.96130

Analyte CM4344
W. Quantile =0.74900

Background Data Summary: Mean=0.513E-02 STD.DEV =0.336E-02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic =0.86420

Analyte CO60
W. Quantile =0.78100

Background Data Summary: Mean=0.500E-02 STD.DEV =0.183E-02 No.Samps. = 10

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic =0.87560

Analyte U235
W. Quantile =0.74900

Background Data Summary: Mean=0.425E-02 STD.DEV =0.282E-02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic =0.93490

Analyte U238
W. Quantile =0.74900

Background Data Summary: Mean=0.966E-01 STD.DEV =0.253E-01 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic = 0.96080

Analyte U3334
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 93D
W. Statistic = 0.95090

Analyte ZNTOT
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM x
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 94C
W. Statistic =0.95510

Analyte BATOT
W. Quantile =0.74900

Background Data Summary: Mean=0.483E+03 STD.DEV =0.147E+03 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 94C
W. Statistic =0.93440

Analyte BETAG
W. Quantile =0.85800

Background Data Summary: Mean=0.236E+01 STD.DEV =0.291E+00 No.Samps. = 18

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 94C
W. Statistic = 0.94350

Analyte CDTOT
W. Quantile = 0.79200

Combined Shewhart-CUSUM Chart

Well FSB 94C
W. Statistic = 0.91170

Analyte CO60
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 94C
W. Statistic =0.90630

Analyte CUTOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 94C
W. Statistic =0.95810

Analyte NITOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Background Data Summary: Mean=0.134E+03 STD.DEV =0.499E+02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic =0.91650

Analyte CM4344
W. Quantile =0.74900

Background Data Summary: Mean=0.154E+00 STD.DEV =0.691E-01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic =0.93910

Analyte CS137
W. Quantile =0.76400

Background Data Summary: Mean=0.303E+00 STD.DEV =0.541E-01 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic = 0.86370

Analyte I129
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic = 0.96510

Analyte NITOT
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic = 0.95440

Analyte PBTOT
W. Quantile = 0.80500

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic = 0.85040

Analyte RA226
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Background Data Summary: Mean=0.130E-01

STD.DEV =0.177E-02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic =0.84130

Analyte RA228
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic =0.92890

Analyte TRITIUM
W. Quantile =0.87800

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

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Third and Fourth Quarter, 1997

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic =0.95070

Analyte U235
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic =0.95560

Analyte U238
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 94DR
W. Statistic =0.97250

Analyte ZNTOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.97150

Analyte ALPHAG
W. Quantile =0.85800

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic = 0.89900

Analyte AM241
W. Quantile = 0.76400

Background Data Summary: Mean=0.889E-02 STD.DEV = 0.169E-02 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic = 0.89440

Analyte BATOT
W. Quantile = 0.79200

Background Data Summary: Mean=0.815E+03 STD.DEV = 0.146E+03 No.Samps. = 11

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.93410

Analyte CM4344
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.84940

Analyte CS137
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.95940

Analyte CUTOT
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.91090

Analyte HGTOT
W. Quantile =0.79200

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.87910

Analyte NITOT
W. Quantile =0.79200

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.93400

Analyte RA226
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.91440

Analyte U3334
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 95CR
W. Statistic =0.85030

Analyte ZNTOT
W. Quantile =0.79200

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic = 0.93040

Analyte ALPHAG
W. Quantile = 0.85800

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic = 0.93390

Analyte AM241
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic = 0.94810

Analyte BATOT
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic = 0.91170

Analyte BETAG
W. Quantile = 0.85800

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic = 0.85660

Analyte HGTOT
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic = 0.89690

Analyte PBTOT
W. Quantile = 0.79200

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic =0.95280

Analyte U235
W. Quantile =0.76400

Background Data Summary: Mean=0.348E-01 STD.DEV =0.103E-01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic =0.93460

Analyte U238
W. Quantile =0.74900

Background Data Summary: Mean=0.121E+01 STD.DEV =0.246E+00 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic =0.91720

Analyte U3334
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 95DR
W. Statistic =0.96490

Analyte ZNTOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 96AR
W. Statistic =0.92720

Analyte BATOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 96AR
W. Statistic =0.82750

Analyte RA228
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 97A
W. Statistic = 0.93510

Analyte BETAG
W. Quantile = 0.86300

Background Data Summary: Mean=0.674E-02 STD.DEV =0.462E-02 No.Samps. = 19

Combined Shewhart-CUSUM Chart

Well FSB 97A
W. Statistic = 0.90470

Analyte TC99
W. Quantile = 0.74900

Background Data Summary: Mean=-.280E+01 STD.DEV =0.168E+01 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 97A

W. Statistic =0.83250

Analyte ZNTOT

W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 97C

W. Statistic =0.95100

Analyte ALPHAG

W. Quantile =0.86300

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.90250

Analyte AM241
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.96900

Analyte BATOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.92160

Analyte BETAG
W. Quantile =0.85800

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.91950

Analyte CDTOT
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic = 0.91210

Analyte CM4344
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic = 0.86210

Analyte CUTOT
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.82360

Analyte TH228
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.85820

Analyte TH230
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.92050

Analyte TRITIUM
W. Quantile =0.86300

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.94920

Analyte U235
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.95840

Analyte U238
W. Quantile =0.76400

Background Data Summary: Mean=0.614E+00 STD.DEV =0.490E-01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 97C
W. Statistic =0.92180

Analyte ZNTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.167E+03 STD.DEV =0.663E+02 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 97D

W. Statistic =0.93810

Analyte BATOT

W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB 97D

W. Statistic =0.93900

Analyte BETAG

W. Quantile =0.86300

STD. Mean O
+CUSUM +
-CUSUM X

Background Data Summary: Mean=0.150E+01 STD.DEV =0.470E+00 No.Samps. = 19

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic = 0.92820

Analyte CM4344
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic = 0.88830

Analyte CUTOT
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic =0.94960

Analyte PBTOT
W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic =0.84360

Analyte TC99
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic =0.94430

Analyte TRITIUM
W. Quantile =0.86300

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic =0.93080

Analyte U238
W. Quantile =0.74900

STD. Mean O

+CUSUM +

-CUSUM X

F-Area HWMF

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Third and Fourth Quarter, 1997

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic =0.95490

Analyte U3334
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 97D
W. Statistic =0.93090

Analyte ZNTOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Background Data Summary: Mean=0.170E+03 STD.DEV =0.307E+02No.Samps. = 9

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic = 0.98110

Analyte AM241
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic = 0.83850

Analyte BATOT
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic =0.95240

Analyte BETAG
W. Quantile =0.86800

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic =0.94110

Analyte CM4344
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic =0.84680

Analyte CUTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.470E+02 STD.DEV =0.258E+02 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic =0.90520

Analyte HGTOT
W. Quantile =0.74900

Background Data Summary: Mean=0.348E+00 STD.DEV =0.215E+00 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic =0.90040

Analyte I129
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic =0.88890

Analyte RA226
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 98C
W. Statistic = 0.95370

Analyte U238
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 98D
W. Statistic = 0.93190

Analyte ALPHAG
W. Quantile = 0.85800

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 98D
W. Statistic =0.93420

Analyte BATOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 98D
W. Statistic =0.95270

Analyte CDTOT
W. Quantile =0.79200

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 98D
W. Statistic =0.96130

Analyte CRTOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 98D
W. Statistic =0.90680

Analyte NITOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 99A
W. Statistic =0.96120

Analyte BATOT
W. Quantile =0.83500

Background Data Summary: Mean=0.327E+02 STD.DEV =0.242E+01 No.Samps. = 15

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic =0.93130

Analyte ALPHAG
W. Quantile =0.87300

Background Data Summary: Mean=0.189E-01 STD.DEV =0.126E-01 No.Samps. = 21

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic = 0.91160

Analyte BATOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic = 0.95090

Analyte BETAG
W. Quantile = 0.87300

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic = 0.89910

Analyte CCL3F
W. Quantile = 0.84400

1Q96 1Q97 1Q98 1Q99 1Q00 1Q01 1Q02
Background Data Summary: Mean=0.225E+00 STD.DEV = 0.736E+00 No.Samps. = 16

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic = 0.97330

Analyte I129
W. Quantile = 0.74900

1Q96 1Q97 1Q98 1Q99 1Q00 1Q01 1Q02
Background Data Summary: Mean=0.975E-02 STD.DEV = 0.292E-02 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic =0.93900

Analyte SR90
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic =0.97080

Analyte TRCLE
W. Quantile =0.81400

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic = 0.84910

Analyte U3334
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB 99C
W. Statistic = 0.89300

Analyte ZNTOT
W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB 99D
W. Statistic = 0.93010

Analyte BETAG
W. Quantile = 0.86800

Background Data Summary: Mean=0.141E-01 STD.DEV =0.350E-02 No.Samps. = 20

Combined Shewhart-CUSUM Chart

Well FSB 99D
W. Statistic = 0.89550

Analyte PBTOT
W. Quantile = 0.79200

Background Data Summary: Mean=0.552E+01 STD.DEV =0.171E+01 No.Samps. = 11

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB100A
W. Statistic = 0.94320

Analyte BATOT
W. Quantile = 0.81400

Background Data Summary: Mean=0.461E+02 STD.DEV =0.319E+01 No.Samps. = 13

Combined Shewhart-CUSUM Chart

Well FSB100A
W. Statistic = 0.92110

Analyte BETAG
W. Quantile = 0.88400

Background Data Summary: Mean=-.558E+01 STD.DEV =0.523E+00 No.Samps. = 24

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB101A
W. Statistic = 0.94610

Analyte BATOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well FSB102C
W. Statistic = 0.94220

Analyte ALPHAG
W. Quantile = 0.84400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB102C
W. Statistic = 0.91160

Analyte CDTOT
W. Quantile = 0.79200

Background Data Summary: Mean=0.453E+01 STD.DEV = 0.870E+00 No.Samps. = 11

Combined Shewhart-CUSUM Chart

Well FSB102C
W. Statistic = 0.82630

Analyte CH2CL2
W. Quantile = 0.74900

Background Data Summary: Mean=0.117E+01 STD.DEV = 0.805E+00 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB102C
W. Statistic = 0.87540

Analyte RA226
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well FSB104C
W. Statistic = 0.88700

Analyte ALPHAG
W. Quantile = 0.81400

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB104C
W. Statistic =0.98970

Analyte BETAG
W. Quantile =0.86800

Background Data Summary: Mean=0.332E-01 STD.DEV =0.175E-01 No.Samps. = 20

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic =0.89700

Analyte ALPHAG
W. Quantile =0.85100

Background Data Summary: Mean=0.505E+00 STD.DEV =0.158E+00 No.Samps. = 17

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic =0.88160

Analyte AM241
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic =0.87250

Analyte BATOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic = 0.89620

Analyte BETAG
W. Quantile = 0.85100

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic = 0.95620

Analyte CDTOT
W. Quantile = 0.78100

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic =0.92210

Analyte RA226
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic =0.87990

Analyte RA228
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic =0.90650

Analyte U3334
W. Quantile =0.74900

Background Data Summary: Mean=0.191E+00 STD.DEV =0.117E+00No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB104D
W. Statistic =0.93960

Analyte ZNTOT
W. Quantile =0.74900

Background Data Summary: Mean=0.551E+02 STD.DEV =0.743E+01No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB110C
W. Statistic =0.94350

Analyte BETAG
W. Quantile =0.87800

Combined Shewhart-CUSUM Chart

Well FSB110C
W. Statistic =0.87530

Analyte CH2CL2
W. Quantile =0.81400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB110C
W. Statistic =0.87210

Analyte CUTOT
W. Quantile =0.80500

Background Data Summary: Mean=0.130E+01 STD.DEV =0.637E+00 No.Samps. = 12

Combined Shewhart-CUSUM Chart

Well FSB110C
W. Statistic =0.87290

Analyte I129
W. Quantile =0.76400

Background Data Summary: Mean=0.117E-01 STD.DEV =0.539E-02 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB110C
W. Statistic = 0.96060

Analyte ZNTOT
W. Quantile = 0.80500

Background Data Summary: Mean=0.929E+02 STD.DEV = 0.229E+02 No.Samps. = 12

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic = 0.90810

Analyte ALPHAG
W. Quantile = 0.85800

Background Data Summary: Mean=0.771E+00 STD.DEV = 0.338E+00 No.Samps. = 18

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.95740

Analyte CM4344
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.85420

Analyte CRTOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.89480

Analyte CUTOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.82690

Analyte HGTOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.91130

Analyte I129
W. Quantile =0.74900

Background Data Summary: Mean=0.329E+00 STD.DEV =0.164E+00No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.82150

Analyte TC99
W. Quantile =0.74900

Background Data Summary: Mean=0.828E+01 STD.DEV =0.104E+02No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic = 0.96470

Analyte U235
W. Quantile = 0.79200

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic = 0.97480

Analyte U238
W. Quantile = 0.79200

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.95710

Analyte U3334
W. Quantile =0.76400

Background Data Summary: Mean=0.217E+00 STD.DEV =0.883E-01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well FSB110D
W. Statistic =0.85660

Analyte ZNTOT
W. Quantile =0.74900

Background Data Summary: Mean=0.112E+03 STD.DEV =0.563E+02 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB112C
W. Statistic =0.91940

Analyte CDTOT
W. Quantile =0.80500

Background Data Summary: Mean=0.292E+02 STD.DEV =0.952E+01 No.Samps. = 12

Combined Shewhart-CUSUM Chart

Well FSB112C
W. Statistic =0.85850

Analyte HGTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.220E+00 STD.DEV =0.131E+00 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM x

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB112C
W. Statistic = 0.92430

Analyte RA226
W. Quantile = 0.78100

Combined Shewhart-CUSUM Chart

Well FSB112C
W. Statistic = 0.82750

Analyte U238
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB112C
W. Statistic =0.84950

Analyte U3334
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well FSB112C
W. Statistic =0.95040

Analyte ZNTOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic = 0.90430

Analyte ALPHAG
W. Quantile = 0.85800

Background Data Summary: Mean = -.176E+01 STD.DEV = 0.768E+00 No.Samps. = 18

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic = 0.89250

Analyte BATOT
W. Quantile = 0.76400

Background Data Summary: Mean = 0.452E+03 STD.DEV = 0.246E+03 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic =0.92390

Analyte CUTOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic =0.90790

Analyte I129
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic =0.86670

Analyte NITOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic =0.94200

Analyte RA226
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic =0.82210

Analyte TC99
W. Quantile =0.74900

Background Data Summary: Mean=0.491E+01 STD.DEV =0.620E+01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic =0.90500

Analyte TH228
W. Quantile =0.74900

Background Data Summary: Mean=0.138E-02 STD.DEV =0.920E-03 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic = 0.91770

Analyte TH230
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic = 0.94000

Analyte U238
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic = 0.94250

Analyte U3334
W. Quantile = 0.74900

Background Data Summary: Mean=0.121E-01 STD.DEV = 0.181E-02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB112D
W. Statistic = 0.88540

Analyte ZNTOT
W. Quantile = 0.76400

Background Data Summary: Mean=0.741E+02 STD.DEV = 0.413E+02 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB117D
W. Statistic = 0.97170

Analyte BETAG
W. Quantile = 0.86800

Combined Shewhart-CUSUM Chart

Well FSB117D
W. Statistic = 0.99010

Analyte CDTOT
W. Quantile = 0.79200

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB117D
W. Statistic = 0.87280

Analyte RA226
W. Quantile = 0.74900

Background Data Summary: Mean=0.354E-01 STD.DEV =0.275E-01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well FSB117D
W. Statistic = 0.92020

Analyte TRITIUM
W. Quantile = 0.86800

Background Data Summary: Mean=0.437E+04 STD.DEV =0.308E+04 No.Samps. = 20

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB117D
W. Statistic = 0.94680

Analyte U238
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well FSB121C
W. Statistic = 0.88060

Analyte ZNTOT
W. Quantile = 0.79200

STD. Mean O
+CUSUM +
-CUSUM X

F-Area HWMF

Combined Shewhart-CUSUM Chart

Well FSB121DR
W. Statistic = 0.95820

Analyte ALPHAG
W. Quantile = 0.82500

Combined Shewhart-CUSUM Chart

Well FSB121DR
W. Statistic = 0.87000

Analyte BATOT
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well FSB121DR
W. Statistic =0.91990

Analyte PBTOT
W. Quantile =0.81400

Background Data Summary: Mean=0.499E+02 STD.DEV =0.268E+02No.Samps. = 13

STD. Mean O
+CUSUM +
-CUSUM X

Appendix G

UIC Sample Results

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F-Area WTU UIC Sample Results: 6/97-12/97

UIC Permitted Constituents	Reg	June	July	August	September	October	November	December
Constituent	Unit Limit	Result	Result	Result	Result	Result	Result	Result
Section I, INORGANICS								
Arsenic	µg/L 50	<20	<5	<5	<5	<5	<5	<5
Barium	µg/L 2000	42.00	12.90	17.40	15.20	10.60	62.80	59.10
Cadmium	µg/L 5	<5	<5	<5	<5	<5	<5	<5
Chromium	µg/L 100	<10	<5	<5	<5	<5	<5	<5
Lead	µg/L 50	4.00	<5	<5	<5	<5	<5	<5
Mercury	µg/L 2	<0.1	<0.2	<0.2	<0.2	0.34	<0.2	0.30
Selenium	µg/L 50	<5	<5	<5	<5	<5	<5	<5
Silver	µg/L 50	<5	<5	<5	<5	<5	<5	<5
Section II, ORGANICS								
Antimony	µg/L 6	<5	<10	<10	<10	<10	<10	<10
Cobalt	µg/L 140	<10	12.90	6.46	<5	<5	18.80	14.80
Copper	µg/L 1300	<5	<5	<5	<5	<5	7.14	<5
Cyanide	µg/L 200000	28.00	<10	<10	<10	<10	<10	<10
Benzene	µg/L 5	<5	<2	<2	<1	<1	<1	<1
BEHP	µg/L 140	18.30	<0.01	<10	<10.1	11.00	<11.2	<10.1
Methylene Chloride	µg/L 5	<5	<5	<5	<1	<1	<1	<1
Nickel	µg/L 100	33.00	9.38	<5	<5	<5	5.09	5.88
Phenol	µg/L 10	<10			<10.3	<5	<5	
Tetrachloroethylene	µg/L 5		<2	<2	<1	<1	<1	<1
Thallium	µg/L 2	<2			<5	<5	<5	
Tin	µg/L 50	<25	<10	<10	<10	<10	<10	<10
Trichloroethylene	µg/L 5	<2	<2	<2	1.07	1.35	<1	1.25
Trichlorofluoromethane	µg/L 100	<10	<2	<2	<1	<1	<1	<1
Vanadium	µg/L 49	<20	<5	<5	<5	<5	<5	<5
Zinc	µg/L 5000	96.00	32.80	13.80	<5	<5	14.30	9.08
Section III, RADIONUCLIDES								
Gross Alpha	pCi/L 15	<0.2	8.49	16.90	<1.4	7.95	88.30	91.60
Gross Beta	pCi/L 50	23.97	7.76	29.30	43.70	105.00	289.00	289.00
Total Radium (226+228)	pCi/L 5	BDL	1.17	BDL	>5	5.44	15.27	21.77
Section IV, RADIONUCLIDES								
Americium-241	pCi/L SOA	<2.22	3.09	0.82	<0.789	<0.156	3.49	3.61
Cesium-137	pCi/L SOB	<1.76	<4.44	<0.66	<3.41	<3.72	<3.4	<3.67
Curium-242	pCi/L SOA	<2.01	<1.15	<0.34	<0.454	<0.173	<0.144	<0.264
Curium-243/244	pCi/L SOA	<1.99, <1.84	4.96	1.73	<0.669	<0.191	5.14	9.81
Curium-246	pCi/L SOA	<1.29	<1.06	0.00	<0.319	<0.809	<0.0792	<0.247
Carbon-14	pCi/L SOB	<6.27	<8.41	<40.3	<22.6	<105	<108	111.00
Cobalt-60	pCi/L SOB	<1.91	<3.99	<5.61	<3.94	<4.18	<3.57	<3.84
Iodine-129	pCi/L SOB	<4	4.31	54.10	>50	>50	66.70	74.40
Plutonium-238	pCi/L SOA		<0.83	<0.13	<0.13	<0.185	<0.565	<0.306
Plutonium-239/240	pCi/L SOA	BDL	<0.42	<0.06	<0.06	<0.185	<0.244	<0.389
Nickel-63	pCi/L SOB	<0.7	<3.99	<5.61	<3.94	<4.18	<3.57	<3.84
Radium-226	pCi/L SOR	<1.84	<0.43	<0.58	1.67	<0.383	3.87	2.27
Radium-228	pCi/L SOR	<1.66	1.17	<0.73	>5	5.44	11.40	19.50
Strontium-90	pCi/L SOB	<0.42	2.94	18.70	104.00	53.80	126.00	>50
Technetium-99	pCi/L SOB	<2.31	<10.2	21.40	<43.1	22.10	53.20	52.40
Thorium-228	pCi/L SOA	<4.23	<0.65	<0.33	<0.535	<0.408	0.34	<0.277
Thorium-230	pCi/L SOA	<1.75	0.54	<0.11	1.34	<0.207	<0.206	<0.113
Thorium-232	pCi/L SOA	<1.6	<0.241	<0.04	<0.283	<0.0893	<0.222	<0.113
Uranium-233/234	pCi/L SOA	<2.96	2.00	4.93	0.79	1.58	26.60	24.20
Uranium-234	pCi/L SOA	<2.5						
Uranium-235	pCi/L SOA	<8.62	<0.109	0.43	0.15	0.19	3.63	2.92
Uranium-238	pCi/L SOA	<2.08	2.75	9.81	1.69	1.95	46.30	44.10
Sum of Alphas		BDL	13.34	17.72	5.64	3.72	89.37	86.91
Sum of Betas		BDL	8.42	94.20	104.00	81.34	257.30	257.30

F-Area WTU UIC Sample Results: June 1997

UIC Permitted Constituents	Reg	June	Exceedence	
Constituent	Unit	Limit	Result	Y/N
Section I, INORGANICS				
Non-rad samples dated 7/2/97				
Arsenic	µg/L	50	<20	N
Barium	µg/L	2000	42.00	N
Cadmium	µg/L	5	<5	N
Chromium	µg/L	100	<10	N
Lead	µg/L	50	4.00	N
Mercury	µg/L	2	<0.1	N
Selenium	µg/L	50	<5	N
Silver	µg/L	50	<5	N
Section II, ORGANICS				
Antimony	µg/L	6	<5	N
Cobalt	µg/L	140	<10	N
Copper	µg/L	1300	<5	N
Cyanide	µg/L	200000	28.00	N
Benzene	µg/L	5	<5	N
BEHP	µg/L	140	18.30	N
Methylene Chloride	µg/L	5	<5	N
Nickel	µg/L	100	33.00	N
Phenol	µg/L	10	<10	N
Tetrachloroethylene	µg/L	5		Wrong constituent specified for analysis
Thallium	µg/L	2	<2	N
Tin	µg/L	50	<25	N
Trichloroethylene	µg/L	5		Wrong constituent specified for analysis
Trichlorofluoromethane	µg/L	100	<10	N
Vanadium	µg/L	49	<20	N
Zinc	µg/L	5000	96.00	N
Section III, RADIONUCLIDES				
Rad Samples dated 6/19/97				
Gross Alpha	pCi/L	15	<0.2	N
Gross Beta	pCi/L	50	23.97	N
Total Radium (226+228)	pCi/L	5	BDL	N
Section IV, RADIONUCLIDES				
Americium-241	pCi/L	SOA	<2.22	N
Cesium-137	pCi/L	SOB	<1.76	N
Curium-242	pCi/L	SOA	<2.01	N
Curium-243/244	pCi/L	SOA	<1.99,<1.84	N
Curium-246	pCi/L	SOA	<1.29	N
Carbon-14	pCi/L	SOB	<6.27	N
Cobalt-60	pCi/L	SOB	<1.91	N
Iodine-129	pCi/L	SOB	<4	N
Plutonium-238	pCi/L	SOA		Lab results not retrievable
Plutonium-239/240	pCi/L	SOA	BDL	Results supplied separately at different DLs
Nickel-63	pCi/L	SOB	<0.7	N
Radium-226	pCi/L	SOR	<1.84	N
Radium-228	pCi/L	SOR	<1.66	N
Strontium-90	pCi/L	SOB	<0.42	N
Technetium-99	pCi/L	SOB	<2.31	N
Thorium-228	pCi/L	SOA	<4.23	N
Thorium-230	pCi/L	SOA	<1.75	N
Thorium-232	pCi/L	SOA	<1.6	N
Uranium-233/234	pCi/L	SOA	<2.96	N
Uranium-234	pCi/L	SOA	<2.5	N
Uranium-235	pCi/L	SOA	<8.62	N
Uranium-238	pCi/L	SOA	<2.08	N
Sum of Alphas			BDL	N
Sum of Betas			BDL	N

F-Area WTU UIC Sample Results: July 1997

UIC Permitted Constituents	Reg	Raw	Rad			July	Exceedence		
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 7/29/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	12.9			5	12.90	N	
Cadmium	µg/L	5	0.298		J	5	<5	N	
Chromium	µg/L	100	0.925		J	5	<5	N	
Lead	µg/L	50	2.75		J	5	<5	N	
Mercury	µg/L	2	0.161		U	0.2	<0.2	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	1.76		UV	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	10		U	10	<10	N	DL too high
Cobalt	µg/L	140	12.9			5	12.90	N	
Copper	µg/L	1300	5		U	5	<5	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	2		U	2	<2	N	
BEHP	µg/L	140	0.01		U	0.01	<0.01	N	
Methylene Chloride	µg/L	5	5		U	5	<5	N	
Nickel	µg/L	100	9.38			5	9.38	N	
Phenol	µg/L	10							Constituent not specified for analysis
Tetrachloroethylene	µg/L	5	2		U	2	<2	N	
Thallium	µg/L	2							Constituent not specified for analysis
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	2		U	2	<2	N	
Trichlorofluoromethane	µg/L	100	2		U	2	<2	N	
Vanadium	µg/L	49	5		U	5	<5	N	
Zinc	µg/L	5000	32.8			5	32.80	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	8.49	1.82		1.39	8.49	N	
Gross Beta	pCi/L	50	7.76	1.1		1.32	7.76	N	
Total Radium (226+228)	pCi/L	5					1.17	N	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	3.09	1.89		2.37	3.09	N	
Cesium-137	pCi/L	SOB	2.39	2.28	UI	4.44	<4.44	N	
Curium-242	pCi/L	SOA	0.0523	0.105	UI	1.15	<1.15	N	
Curium-243/244	pCi/L	SOA	4.96	2.65		3.6	4.96	N	
Curium-246	pCi/L	SOA	0.152	0.414	UI	1.06	<1.06	N	
Carbon-14	pCi/L	SOB	3.2	4.97	UI	8.41	<8.41	N	
Cobalt-60	pCi/L	SOB	1.03	1.96	UI	3.99	<3.99	N	
Iodine-129	pCi/L	SOB	4.31	1.9		2.21	4.31	N	
Plutonium-238	pCi/L	SOA	0.109	0.39	UI	0.828	<0.83	N	
Plutonium-239/240	pCi/L	SOA	0.0476	0.175	UI	0.416	<0.42	N	
Nickel-63	pCi/L	SOB					<3.99	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	0.199	0.259	UI	0.43	<0.43	N	
Radium-228	pCi/L	SOR	1.17	0.541		0.987	1.17	N	
Strontium-90	pCi/L	SOB	2.94	0.66		1.07	2.94	N	
Technetium-99	pCi/L	SOB	7.73	4.9	UI	10.2	<10.2	N	
Thorium-228	pCi/L	SOA	0.0556	0.298	UI	0.654	<0.65	N	
Thorium-230	pCi/L	SOA	0.536	0.298		0.115	0.54	N	
Thorium-232	pCi/L	SOA	0.0189	0.0858	UI	0.241	<0.241	N	
Uranium-233/234	pCi/L	SOA	2	0.856		0.444	2.00	N	
Uranium-235	pCi/L	SOA	0.192	0.301	UI	0.109	<0.109	N	
Uranium-238	pCi/L	SOA	2.75	1.02		0.444	2.75	N	
Sum of Alphas							13.34	N	
Sum of Betas							8.42	N	

F-Area WTU UIC Sample Results: August 1997

UIC Permitted Constituents		Reg	Raw	Rad			August	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 8/27/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	17.4			5	17.40	N	
Cadmium	µg/L	5	0.407		J	5	<5	N	
Chromium	µg/L	100	0.966		J	5	<5	N	
Lead	µg/L	50	1.89		J	5	<5	N	
Mercury	µg/L	2	0.2		U	0.2	<0.2	N	
Selenium	µg/L	50	2.97		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	2.22		U	10	<10	N	DL too high
Cobalt	µg/L	140	6.46			5	6.46	N	
Copper	µg/L	1300	2.59		J	5	<5	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	2		U	2	<2	N	
BEHP	µg/L	140	10		U	10	<10	N	
Methylene Chloride	µg/L	5	5		U	5	<5	N	
Nickel	µg/L	100	4.95		J	5	<5	N	
Phenol	µg/L	10							Constituent not specified for analysis
Tetrachloroethylene	µg/L	5	2		U	2	<2	N	
Thallium	µg/L	2							Constituent not specified for analysis
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	2		U	2	<2	N	
Trichlorofluoromethane	µg/L	100	2		U	2	<2	N	
Vanadium	µg/L	49	5		U	5	<5	N	
Zinc	µg/L	5000	13.8			5	13.80	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	16.9	1.81		1.08	16.90	Y	
Gross Beta	pCi/L	50	29.3	1.56		1.48	29.30	N	
Total Radium (226+228)	pCi/L	5					BDL	N	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	0.821	0.398		0.371	0.82	N	
Cesium-137	pCi/L	SOB	0.643	3.49	UI	6.57	<0.66	N	
Curium-242	pCi/L	SOA	0.0009	0.0988	UI	0.337	<0.34	N	
Curium-243/244	pCi/L	SOA	1.73	0.601		0.416	1.73	N	
Curium-246	pCi/L	SOA	0	0		0.117	0.00	N	
Carbon-14	pCi/L	SOB	28.8	24.3	UI	40.3	<40.3	N	
Cobalt-60	pCi/L	SOB	-2.42	3.31	UI	5.61	<5.61	N	
Iodine-129	pCi/L	SOB	54.1	6.7		1.21	54.10	N	
Plutonium-238	pCi/L	SOA	0.129	0.0916	UI	0.132	<0.13	N	
Plutonium-239/240	pCi/L	SOA	0.018	0.0322	UI	0.0605	<0.06	N	
Nickel-63	pCi/L	SOB					<5.61	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	1.06	0.562	U	0.581	<0.58	N	
Radium-228	pCi/L	SOR	-0.123	0.419	UI	0.732	<0.73	N	
Strontium-90	pCi/L	SOB	18.7	1.52		1.51	18.70	N	
Technetium-99	pCi/L	SOB	21.4	4.74		8.1	21.40	N	
Thorium-228	pCi/L	SOA	0	0.179	UI	0.329	<0.33	N	
Thorium-230	pCi/L	SOA	0.0943	0.0826	UI	0.113	<0.11	N	
Thorium-232	pCi/L	SOA	0	0	UI	0.0354	<0.04	N	
Uranium-233/234	pCi/L	SOA	4.93	0.919		0.209	4.93	N	
Uranium-235	pCi/L	SOA	0.431	0.228		0.173	0.43	N	
Uranium-238	pCi/L	SOA	9.81	1.5		0.0831	9.81	N	
Sum of Alphas							17.72	Y	
Sum of Betas							94.20	Y	

F-Area WTU UIC Sample Results: September 1997

UIC Permitted Constituents		Reg	Raw	Rad			September	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 9/25/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	15.2			5	15.20	N	
Cadmium	µg/L	5	0.338		J	5	<5	N	
Chromium	µg/L	100	5		U	5	<5	N	
Lead	µg/L	50	5		U	5	<5	N	
Mercury	µg/L	2	0.198		U	0.2	<0.2	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	10		U	10	<10	N	DL too high
Cobalt	µg/L	140	1.41		J	5	<5	N	
Copper	µg/L	1300	3.25		J	5	<5	N	
Cyanide	µg/L	200000	12.8		J	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	10.1		U	10.1	<10.1	N	
Methylene Chloride	µg/L	5	1		U	1	<1	N	
Nickel	µg/L	100	2.52		J	5	<5	N	
Phenol	µg/L	10	10.3		UJ	10.3	<10.3	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Thallium	µg/L	2	5		U	5	<5	N	
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	1.07			1	1.07	N	
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N	
Vanadium	µg/L	49	0.812		J	5	<5	N	
Zinc	µg/L	5000	3.27		U	5	<5	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	1.33	1.15	UI	1.4	<1.4	N	
Gross Beta	pCi/L	50	43.7	2.32		1.74	43.70	N	
Total Radium (226+228)	pCi/L	5					>5	Y	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	-0.119	0.424	UI	0.789	<0.789	N	
Cesium-137	pCi/L	SOB	2.94	3.97	UI	3.41	<3.41	N	
Curium-242	pCi/L	SOA	0.205	0.272	UI	0.454	<0.454	N	
Curium-243/244	pCi/L	SOA	0.477	0.425	UI	0.669	<0.669	N	
Curium-246	pCi/L	SOA	0.167	0.197	UI	0.319	<0.319	N	
Carbon-14	pCi/L	SOB	1.82	13.1	UI	22.6	<22.6	N	
Cobalt-60	pCi/L	SOB	0.603	3.82	UI	3.94	<3.94	N	
Iodine-129	pCi/L	SOB	118	15	J	2.03	>50	Y	Estimated value; probably elevated
Plutonium-238	pCi/L	SOA	-0.407	0.427	UIJ	1.58	<0.13	N	
Plutonium-239/240	pCi/L	SOA	-0.0801	0.0857	UI	0.719	<0.06	N	
Nickel-63	pCi/L	SOB					<3.94	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	1.67	0.926		1.11	1.67	N	
Radium-228	pCi/L	SOR	5.86	0.526	J	0.588	>5	Y	Estimated value; probably elevated
Strontium-90	pCi/L	SOB	104	3.59		1.55	104.00	Y	
Technetium-99	pCi/L	SOB	102	24.8	R	43.1	invalid	N	Rejected analysis
Thorium-228	pCi/L	SOA	-0.26	0.254	UI	0.535	<0.535	N	
Thorium-230	pCi/L	SOA	1.34	0.414		0.301	1.34	N	
Thorium-232	pCi/L	SOA	0.0984	0.163	UI	0.283	<0.283	N	
Uranium-233/234	pCi/L	SOA	0.794	0.198		0.0788	0.79	N	
Uranium-235	pCi/L	SOA	0.145	0.0786		0.031	0.15	N	
Uranium-238	pCi/L	SOA	1.69	0.31		0.0788	1.69	N	
Sum of Alphas							5.64	N	
Sum of Betas							104.00	Y	

F-Area WTU UIC Sample Results: October 1997

UIC Permitted Constituents		Reg	Raw	Rad			October	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 10/23/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	10.6			5	10.60	N	
Cadmium	µg/L	5	5		U	5	<5	N	
Chromium	µg/L	100	5		U	5	<5	N	
Lead	µg/L	50	5		UJ	5	<5	N	
Mercury	µg/L	2	0.337			0.2	0.34	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	10		U	10	<10	N	DL too high
Cobalt	µg/L	140	5		U	5	<5	N	
Copper	µg/L	1300	5		U	5	<5	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	11			10.5	11.00	N	
Methylene Chloride	µg/L	5	1		U	1	<1	N	
Nickel	µg/L	100	5		U	5	<5	N	
Phenol	µg/L	10	5		U	5	<5	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Thallium	µg/L	2	5		U	5	<5	N	DL too high
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	1.35			1	1.35	N	
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N	
Vanadium	µg/L	49	5		U	5	<5	N	
Zinc	µg/L	5000	1.96		U	5	<5	N	
Section III, RADIONUCULIDES									
Gross Alpha	pCi/L	15	7.95	3.81			7.95	N	
Gross Beta	pCi/L	50	105	7.5			105.00	Y	
Total Radium (226+228)	pCi/L	5					5.44	Y	
Section IV, RADIONUCULIDES									
Americium-241	pCi/L	SOA	0.138	0.102	UI	0.156	<0.156	N	
Cesium-137	pCi/L	SOB	0.763	2.07	UI	3.72	<3.72	N	
Curium-242	pCi/L	SOA	-0.0207	0.0636	UI	0.173	<0.173	N	
Curium-243/244	pCi/L	SOA	0.152	0.117	UI	0.191	<0.191	N	
Curium-246	pCi/L	SOA	0.0328	0.0455	UI	0.0809	<0.809	N	
Carbon-14	pCi/L	SOB	20.9	61.1	UI	105	<105	N	
Cobalt-60	pCi/L	SOB	0.0163	2.3	UI	4.18	<4.18	N	
Iodine-129	pCi/L	SOB	88.4	11.1	J	3.43	>50	Y	Estimated result; probably elevated
Plutonium-238	pCi/L	SOA	0.22	0.131	UIJ	0.185	<0.185	N	
Plutonium-239/240	pCi/L	SOA	-0.0106	0.0753	UI	0.185	<0.185	N	
Nickel-63	pCi/L	SOB					<4.18	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	0.204	0.236	UI	0.383	<0.383	N	
Radium-228	pCi/L	SOR	5.44	0.838		1.05	5.44	Y	
Strontium-90	pCi/L	SOB	53.8	5.52		4.61	53.80	Y	
Technetium-99	pCi/L	SOB	22.1	10.1		19.7	22.10	N	
Thorium-228	pCi/L	SOA	0.0681	0.178	UI	0.408	<0.408	N	
Thorium-230	pCi/L	SOA	0.0381	0.0884	UI	0.207	<0.207	N	
Thorium-232	pCi/L	SOA	0	0	UI	0.0893	<0.0893	N	
Uranium-233/234	pCi/L	SOA	1.58	0.307		0.0316	1.58	N	
Uranium-235	pCi/L	SOA	0.19	0.0919		0.0317	0.19	N	
Uranium-238	pCi/L	SOA	1.95	0.354		0.0649	1.95	N	
Sum of Alphas							3.72	N	
Sum of Betas							81.34	Y	

F-Area WTU UIC Sample Results: November 1997

UIC Permitted Constituents		Reg	Raw	Rad			November	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 12/3/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	62.8			5	62.80	N	
Cadmium	µg/L	5	0.852		J	5	<5	N	
Chromium	µg/L	100	5		U	5	<5	N	
Lead	µg/L	50	1.07		J	5	<5	N	
Mercury	µg/L	2	0.2		U	0.2	<0.2	N	
Selenium	µg/L	50	1.69		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	10		U	10	<10	N	DL too high
Cobalt	µg/L	140	18.8			5	18.80	N	
Copper	µg/L	1300	7.14			5	7.14	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		UJ	1	<1	N	
BEHP	µg/L	140	11.2		U	11.2	<11.2	N	
Methylene Chloride	µg/L	5	1		UJ	1	<1	N	
Nickel	µg/L	100	5.09			5	5.09	N	
Phenol	µg/L	10	5		U	5	<5	N	
Tetrachloroethylene	µg/L	5	1		UJ	1	<1	N	
Thallium	µg/L	2	3.63		J	5	<5	N	DL too high
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	1.5		J	1	<1	N	
Trichlorofluoromethane	µg/L	100	1		UJ	1	<1	N	
Vanadium	µg/L	49	0.54		J	5	<5	N	
Zinc	µg/L	5000	14.3			5	14.30	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	88.3	7.8		3.63	88.30	Y	
Gross Beta	pCi/L	50	289	7.45		2.45	289.00	Y	
Total Radium (226+228)	pCi/L	5					15.27	Y	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	3.49	0.496		0.183	3.49	N	
Cesium-137	pCi/L	SOB	0.798	1.76	UI	3.4	<3.4	N	
Curium-242	pCi/L	SOA	0.0027	0.0701	UI	0.144	<0.144	N	
Curium-243/244	pCi/L	SOA	5.14	0.677		0.285	5.14	N	
Curium-246	pCi/L	SOA	0.0761	0.0606	UI	0.0792	<0.0792	N	
Carbon-14	pCi/L	SOB	58.2	64.2	UI	108	<108	N	
Cobalt-60	pCi/L	SOB	-0.406	1.94	UI	3.57	<3.57	N	
Iodine-129	pCi/L	SOB	66.7	8.84		3.26	66.70	Y	
Plutonium-238	pCi/L	SOA	0.275	0.301	UI	0.565	<0.565	N	
Plutonium-239/240	pCi/L	SOA	0.0597	0.114	UIJ	0.244	<0.244	N	
Nickel-63	pCi/L	SOB					<3.57	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	3.87	1.08		0.758	3.87	N	
Radium-228	pCi/L	SOR	11.4	0.633		0.609	11.40	Y	
Strontium-90	pCi/L	SOB	126	6.71		3.2	126.00	Y	
Technetium-99	pCi/L	SOB	53.2	12.3		19.5	53.20	Y	
Thorium-228	pCi/L	SOA	0.337	0.226		0.326	0.34	N	
Thorium-230	pCi/L	SOA	0.149	0.138	UI	0.206	<0.206	N	
Thorium-232	pCi/L	SOA	0.0529	0.108	UI	0.222	<0.222	N	
Uranium-233/234	pCi/L	SOA	26.6	2.76		0.103	26.60	Y	
Uranium-235	pCi/L	SOA	3.63	0.53		0.104	3.63	N	
Uranium-238	pCi/L	SOA	46.3	4.63		0.132	46.30	Y	
Sum of Alphas							89.37	Y	
Sum of Betas							257.30	Y	

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