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F-AREA HAZARDOUS WASTE MANAGEMENT FACILITY GROUNDWATER MONITORING REPORT (U)

THIRD AND FOURTH QUARTERS 1995

Volume I

Publication Date: March 1996

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FSB and FSL wells
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Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

MASTER

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Abstract

Groundwater at the F-Area Hazardous Waste Management Facility (HWMF) is monitored in compliance with Module III, Section C, of the 1995 RCRA Renewal Permit (South Carolina Hazardous Waste Permit SC1-890-008-989), effective October 5, 1995. The monitoring well network is composed of 86 FSB wells, 9 FSL wells, and well HSB 85A, and is also known as F-Area Seepage Basins. These wells are screened in the three hydrostratigraphic units that make up the uppermost aquifer beneath the F-Area HWMF. A detailed description of the uppermost aquifer is included in the Resource Conservation and Recovery Act (RCRA) Part B post-closure care permit application for the F-Area HWMF submitted to the South Carolina Department of Health and Environmental Control (SCDHEC) in December 1990.

Monitoring results are compared to the SCDHEC Groundwater Protection Standard (GWPS), which is specified in the approved 1995 RCRA Renewal Permit. Historically and currently, gross alpha, nitrate, nonvolatile beta, and tritium are among the primary constituents to exceed standards. Numerous other radionuclides and hazardous constituents also exceeded the GWPS in the groundwater at the F-Area HWMF during the second half of 1995, notably cadmium, lead, radium-226, radium-228, strontium-90, and total alpha-emitting radium. The elevated constituents were found primarily in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (Barnwell/McBean) wells. However, several Aquifer Unit IIA (Congaree) wells also contained elevated levels of constituents.

Isoconcentration/isoactivity maps included in Appendix C of this report indicate both the concentration/activity and extent of the primary contaminants in each of the three hydrostratigraphic units. Geologic cross sections, contained in Volume II, indicate both the extent and depth of contamination of the primary contaminants in all of the hydrostratigraphic units during the second half of 1995. 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.

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Executive Summary

The groundwater in the uppermost aquifer beneath the F-Area Hazardous Waste Management Facility (HWMF), also known as F-Area Seepage Basins, at the Savannah River Site (SRS) is monitored periodically for various hazardous and radioactive constituents as required by Module III, Section C, of the 1995 RCRA Renewal Permit (South Carolina Hazardous Waste Permit SC1-890-008-989), effective October 5, 1995 (SCDHEC, 1995). Currently, 86 wells of the FSB well series, 9 wells of the FSL series, and well HSB 85A comprise the F-Area HWMF monitoring network.

This report describes the groundwater monitoring results and identifies those results that exceeded the permit Groundwater Protection Standard (GWPS) and SRS flagging criteria during third and fourth quarters 1995. Groundwater monitoring reports for the F-Area HWMF are submitted to the South Carolina Department of Health and Environmental Control semiannually as required by Permit SC1-890-008-989.

Several conditions of the new permit were not met because monitoring for third quarter was complete and the sampling schedule for fourth quarter was in place at the time the renewal permit became effective.

The following constituent levels exceeded the GWPS during third quarter 1995 in more than 30 FSB or FSL wells: gross alpha, nitrate-nitrite as nitrogen, tritium, and nonvolatile beta. Between 10 and 20 wells had elevated levels of lead, radium (total alpha-emitting), cadmium, radium-226, radium-228, strontium-90, ALPHASUM (total alpha emitters), and BETASUM (total beta emitters). The following constituents were elevated in fewer than 10 wells: cobalt, mercury, phenols, thallium, trichloroethylene, nickel, and trichlorofluoromethane.

In fourth quarter 1995, the following constituents were elevated in 20 or more wells: gross alpha, nitrate-nitrite as nitrogen, tritium, cadmium, and nonvolatile beta. Lead was elevated in more than 10 wells. Radium (total alpha-emitting), trichloroethylene, trichlorofluoromethane, benzene, and cyanide were each elevated in one well.

Elevated constituents were found primarily in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (Barnwell/McBean). However, nitrate-nitrite as nitrogen, strontium-90, and tritium exceeded the GWPS in one or more of the FSB wells in Aquifer Unit IIA (Congaree).

Groundwater flow directions beneath the F-Area HWMF in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (Barnwell/McBean) were generally south to southeast and southeast toward Fourmile Branch (using universal transverse Mercator coordinates). Flow in Aquifer Unit IIA (Congaree) was generally northwest toward Upper Three Runs Creek. Flow directions and rates have remained relatively constant in recent history.

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Introduction

Description of Facilities

The F-Area Hazardous Waste Management Facility (HWMF), also known as the F-Area Seepage Basins, which consists of the three F-Area Seepage Basins, is located in the central part of the Savannah River Site (SRS) (Figures 1 and 2, Appendix C, Volume I) within the General Separations Area.

The SRS Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) monitors groundwater quality at the F-Area HWMF as mandated by the Resource Conservation and Recovery Act (RCRA) and associated South Carolina regulations. The SRS Environmental Restoration Department provides results of this monitoring to the South Carolina Department of Health and Environmental Control (SCDHEC) semiannually as required by the 1995 RCRA Renewal Permit (SCDHEC, 1995).

The following description outlines important events in the history of the F-Area HWMF:

- The F-Area HWMF began operating in 1955 to replace the Old F-Area Seepage Basin. The three unlined, hydraulically connected basins received wastewater containing low-level radioactive constituents and chemicals primarily from the F-Area Separations Facility (Heffner and Exploration Resources, 1991).
- The RCRA Part A post-closure care permit application was submitted to SCDHEC on September 29, 1980, and the Part B permit application was submitted on February 6, 1985.
- In Administrative Consent Order 85-70-SW (November 7, 1985), the U.S. Department of Energy (DOE) agreed to comply with the South Carolina Hazardous Waste Management Regulations (SCHWMR) and to continue quarterly groundwater monitoring at the F-Area HWMF.
- In Settlement Agreement 86-52-SW (June 20, 1986), SCDHEC required DOE to submit groundwater monitoring reports to address groundwater contamination at the F-Area HWMF.
- On May 1, 1987, Settlement Agreement 87-27-SW became effective. In this agreement, SCDHEC required DOE to submit a revised Part B post-closure care permit application by April 15, 1988, to address a Notice of Deficiency issued by SCDHEC on November 21, 1985.
- DOE submitted a revised Part B post-closure care permit application on April 15, 1988, in compliance with Settlement Agreement 87-27-SW.
- Under the Consent Decree of June 1, 1988 (Natural Resources Defense Council et al., Civil Action 1:85-2583-6, U.S. District Court, District of South Carolina, Aiken Division), the F-Area HWMF was placed on Interim Status.
- Discharge of wastewater to the F-Area HWMF was discontinued on November 7, 1988.
- SCDHEC terminated Interim Status for the F-Area HWMF on November 8, 1988.

- On December 3, 1990, DOE submitted a revised Part B post-closure care permit application to SCDHEC that included a plan for groundwater remediation (WSRC, 1990).
- Closure caps for the F-Area HWMF were completed on January 4, 1991.
- A revised Part B post-closure care permit application was submitted to SCDHEC on January 22, 1991.
- The F-Area Seepage Basins were certified closed April 26, 1991, in accordance with SCHWMR.
- In March 1992, a revised Part B post-closure care permit application (WSRC, 1992a) was submitted to SCDHEC.
- SCDHEC issued a modification with conditions to permit SC1-890-008-989 on September 30, 1992 (SCDHEC, 1992). The permit, effective November 2, 1992, required submittal of a detailed corrective-action plan for groundwater remediation at the F-Area HWMF.
- On February 15, 1994, SCDHEC issued a modification to permit SC1-890-008-989 that changed the groundwater sampling schedule for the F-Area HWMF.
- The 1995 RCRA Renewal Permit (South Carolina Hazardous Waste Permit SC1-890-008-989) (SCDHEC, 1995) for the F-Area HWMF was approved in September 1995 and became effective on October 5, 1995.

Hydrostratigraphic Units

Historically, groundwater monitoring reports for the F-Area HWMF have used the nomenclature *Water Table*, *Barnwell*, *McBean*, and *Congaree* to identify water-bearing units. However, an interim alphanumeric system developed by Aadland and Bledsoe (1990) (Figure 3, Appendix C, Volume I) defines these units at SRS using hydrostratigraphic rather than lithostratigraphic designations. Figure 4 (Appendix C, Volume I) shows a correlation of these designations. For clarity, this report uses the newer nomenclature and also includes the older names used in earlier reports. The F-Area HWMF RCRA Part B post-closure care permit application (WSRC, 1992a), submitted March 1992, includes an in-depth explanation of the new nomenclature.

The F-Area HWMF well network monitors three distinct hydrostratigraphic units in the uppermost aquifer beneath the facility: Aquifer Zone IIB₂ (Water Table), which is supported by Confining Zone IIB₁-IIB₂ (Tan Clay); the poorly confined Aquifer Zone IIB₁ (Barnwell/McBean); and the semi-confined Aquifer Unit IIA (Congaree), which is separated from the overlying Aquifer Zone IIB₁ (Barnwell/McBean) by Confining Unit IIA-IIB (Green Clay). The base of the uppermost aquifer is defined as the uppermost bed of Confining System I-II (Ellenton Formation), which lies approximately 300 ft below the surface of the area. The F-Area HWMF RCRA Part B post-closure care permit application (WSRC, 1992a) includes a detailed description of the geologic and hydrogeologic systems at the F-Area HWMF.

Monitoring Well Nomenclature

Groundwater monitoring wells usually are designated with an abbreviated waste management unit prefix (e.g., FSB), a number (1 through 999), and a suffix (*A*, *B*, *C*, or *D*) that indicates the hydrostratigraphic unit being monitored. At the F-Area HWMF, if the suffix is followed by a *D*, the well monitors Aquifer Zone IIB₂ (Water Table); if it is followed by a *C*, the well monitors

Aquifer Zone IIB₁ (Barnwell/McBean); and if it is followed by an *A* or *B*, the well monitors the lower or upper portion of Aquifer Unit IIA (Congaree), respectively. An *R* designation following the *A*, *B*, *C*, or *D* suffix indicates a replacement well.

There are exceptions to this nomenclature. For example, wells FSB 76, 77, 78, and 79 monitor Aquifer Zone IIB₂ (Water Table), and wells FSB 96AR, 97A, 98AR, 99A, 100A, 101A, 112A, 113A, 114A, and 120A monitor the upper portion of Aquifer Unit IIA (Congaree).

Compliance Monitoring Program

Requirements and Standards

Point-of-compliance (POC) wells monitor groundwater quality at the F-Area HWMF. Appendix IIIC-D of the 1995 RCRA Renewal Permit (SCDHEC, 1995) specifies the following monitoring regimen currently in use:

- quarterly monitoring of all POC wells for cadmium, gross alpha, lead, nitrate-nitrite as nitrogen, nonvolatile beta, pH, specific conductance, tritium, and water elevation
- semiannual monitoring for all constituents listed in the Groundwater Protection Standard (GWPS) at all POC wells
- annual monitoring for all constituents listed in the GWPS at all POC wells
- monitoring during the third quarter of each year of at least 20 percent of the POC wells for Appendix IX constituents (SCDHEC, 1994) plus carbon-14 and cesium-134

Analytical results are compared to the GWPS identified in Appendix IIIC-A of the permit (see Appendix A of this report) and to SRS flagging criteria established by EPD/EMS (see Appendix B).

The GWPS is based on the following standards:

- standards listed in sections 264.94 of SCHWMR (SCDHEC, 1994)
- practical quantitation limits identified in Appendix IX of section 264 of SCHWMR or established by the contract laboratories
- SRS background concentrations

The SRS flagging criteria are based on following standards:

- the Safe Drinking Water Act final Primary Drinking Water Standards (PDWS) established by the U.S. Environmental Protection Agency (EPA)
- proposed PDWS
- Secondary Drinking Water Standards
- method detection limits

Point-of-Compliance Well Network

Currently, the F-Area HWMF POC well network is composed of the following wells (Figures 2, 5, 6, and 7, Appendix C, Volume I):

- 12 Aquifer Zone IIB₂ (Water Table) wells: FSB 88D, 89D, 90D, 91D, 92D, 93D, 94DR, 95DR, 97D, 98D, 99D, and 109D
- 11 Aquifer Zone IIB₁ (Barnwell/McBean) wells: FSB 88C, 89C, 90C, 91C, 92C, 93C, 94C, 95CR, 97C, 98C, and 99C
- 6 Aquifer Unit IIA (Congaree) wells: FSB 96AR, 97A, 98AR, 99A, 100A, and 101A in the upper portion of the Aquifer Unit

Corrective-Action Monitoring Program

Requirements and Standards

Background and plume assessment wells monitor the horizontal and vertical extent of groundwater contamination, groundwater flow rates and directions, and groundwater quality. Appendix IIIC-D of the 1995 RCRA Renewal Permit (SCDHEC, 1995) specifies the following monitoring regimen currently in use:

- quarterly monitoring of all background and plume assessment wells for cadmium, gross alpha, lead, nitrate-nitrite as nitrogen, nonvolatile beta, pH, specific conductance, tritium, and water elevation
- semiannual monitoring for all GWPS constituents at selected plume assessment wells
- annual monitoring for all constituents listed in the GWPS at all background and plume assessment wells.

Analytical results are compared to the GWPS (see Appendix A) and to SRS flagging criteria established by EPD/EMS (see Appendix B).

Corrective-Action Monitoring Well Network

The network of background and plume assessment wells (Figures 2, 5, 6, and 7, Appendix C, Volume I) at the F-Area HWMF currently consists of the following:

Background wells

- Aquifer Zone IIB₂ (Water Table) well: FSB108D
- Aquifer Zone IIB₁ (Barnwell/McBean) well: FSB 76C
- Aquifer Unit IIA (Congaree) well: HSB 85A

Plume assessment wells

- 32 Aquifer Zone IIB₂ (Water Table) wells: FSB 76, 77, 78, 79, 87D, 104D, 105DR, 106D, 107D, 110D, 111D, 112D, 113D, 114D, 115D, 116D, 117D, 118D, 119D, 120D, 121DR, 122D, and 123D and FSL 1D, 2D, 3D, 4D, 5D, 6D, 7D, 8D, and 9D
- 20 Aquifer Zone IIB₁ (Barnwell/McBean) wells: FSB 78C, 79C, 87C, 102C, 103C, 104C, 105C, 106C, 107C, 110C, 111C, 112C, 113C, 114C, 115C, 116C, 120C, 121C, 122C, and 123C
- 12 Aquifer Unit IIA (Congaree) wells: FSB 76B, 78B, 79B, 87B, 112A, 113A, 114A, and 120A in the upper portion and 76A, 78A, 79A, and 87A in the lower portion

Discussion

Groundwater Sampling and Analysis

The sampling procedure for pumped wells (WSRC, 1992b) requires evacuation of a minimum of two well volumes and stabilization of pH, specific conductance, and turbidity prior to sample collection. Stability for each parameter is established when a minimum of three successive measurements, taken at 10-minute intervals, are within 10 percent of each other.

If a well pumps dry before two well volumes are purged or before stabilization is achieved, it must be revisited within 24 hours for the data to be considered part of a single sampling event. On the second visit within 24 hours, samples are taken without purging or stability measurements; thus, these samples may not be representative of the groundwater quality.

Variable-speed pumps are installed in wells at the F-Area HWMF that have had a history of elevated metals. Samples from these wells are collected at a slower rate to minimize turbidity, which has been associated with elevated metals levels. Currently, wells FSB 77, 78, 78C, 79, 79C, 88D, 89D, 90D, 91C, 91D, 92C, 92D, 93D, 94C, 97C, 97D, 98C, 98D, 102C, 104D, 105C, 105DR, 106C, 107D, and 110D and FSL 1D, 2D, 3D, 4D, 5D, 6D, 7D, 8D, and 9D have variable-speed pumps. The remaining FSB and FSL wells have single-speed pumps.

SRS has a program in place to rehabilitate or replace wells that do not produce representative samples from the units being monitored. A complete record of well installations, replacements, and abandonments at the F-Area HWMF is found in the EPD/EMS well inventory (EPD/EMS, 1995). The most recent well construction activity for FSB wells occurred during 1991. All FSL wells were installed in 1992.

Analytical results that exceeded the GWPS (Appendix A) or the SRS flagging criteria (Appendix B) during third and fourth quarters 1995 are presented in this report (Tables D-1, D-2 and D-3, Appendix D, Volume I). For simplicity, results that either equaled or exceeded standards are described as *elevated* or as *exceeding* standards or *above* standards.

Several conditions of the new permit were not met during third and fourth quarters 1995 because monitoring for third quarter was complete and the sampling schedule for fourth quarter was in place at the time the permit became effective. Deviations from the permit include the following:

- Curium-246 was not analyzed for as required by Appendix IIIC-A. This constituent currently is not determined by the analytical laboratory. Curium-245/246 activities are reported as an upper limit for curium-246 activities.
- Total radium (radium-226 and radium-228) was not analyzed for as required by Appendix IIIC-A. This constituent currently is not determined by the analytical laboratory. Results for radium-226, radium-228, and total alpha-emitting radium (radium-223, -224, and -226) are reported to meet this requirement.
- Uranium-234 was not analyzed for as required in Appendix IIIC-A. Uranium-233/234 activities are reported as an upper limit of uranium-234 activities.

- The activity limit for the sum of beta dose <4mrem/yr for beta-emitting constituents was calculated as <50 pCi/L.
- Plume assessment well FSB 79 was not analyzed for individual radionuclides as required in Appendix IIIC-D.
- Carbon-14 was not analyzed during third quarter as required in Appendix IIIC-D.

Permit conditions IIIC.H.11.c.ix-.xii and .xiv-.xvi, which are specific requirements for the corrective-action program, are not discussed in this report because corrective-action has not yet begun at the F-Area HWMF.

Groundwater Monitoring Results

Sampling Problems

Table D-3 (Appendix D, Volume I) identifies the number of well volumes purged and provides sampling codes (I, P, X, etc. as defined in the front section of Appendix D) that describe unusual sampling events for FSB and FSL wells. Unusual sampling events (with applicable sampling codes in parentheses) occurred as follows:

- Wells that went dry during purging and were revisited within 24 hours (X): FSB 87D, 90D, 91C, 93D, 97C, 97D, 108D, 109D, 113A, 113C, 115C, 115D, 116D, 119D, 120D, and 121DR during third quarter; and wells FSB 78C, 90D, 91C, 93D, 94C, 97D, 108D, 109D, 113A, 113C, 115C, 115D, 116D, 119D, 120D, and 121DR and FSL 1D, 2D, 3D, 4D, and 7D during fourth quarter
- Wells that went dry during sampling and water was insufficient to collect all samples (I): FSB106D during third and fourth quarters and FSL 4D during fourth quarter. These wells went dry after field analysis and did not yield enough water for complete laboratory analysis. SRS currently is evaluating the performance of well FSB106D.
- Wells that had no water in the standpipe when water elevations were measured prior to sampling (S): FSB 90D during fourth quarter
- Wells that were inaccessible or had mechanical failure that prevented sampling (P): FSB 77, 78C, 94C, 104D, and 122C during third quarter and FSB104D during fourth quarter. Water from wells FSB 77, 78C, 94C, and 104D requires containerization and was leaking from the casing and could not be captured during third quarter. The surface plumbing was broken for well FSB122C during third quarter and FSB104D during fourth quarter.

Field and Analytical Results

Results for analytes that exceeded the GWPS (see Appendix A) during third and fourth quarters 1995 in the FSB and FSL wells are summarized in Table D-1 (Appendix D, Volume I) and in the discussion below.

Aquifer Zone IIB₂ (Water Table), Third Quarter 1995

Twenty-seven of the 36 FSB wells in Aquifer Zone IIB₂ (Water Table) exhibited one or more parameters that exceeded the GWPS during third quarter 1995. None of the 9 FSL wells in Aquifer Zone IIB₂ were sampled during third quarter 1995. Tritium was elevated in 23 FSB

wells, with a maximum activity of $1.5\text{E}+04$ pCi/mL in well FSB110D. Gross alpha was elevated in 21 FSB wells, with a maximum activity of $1.3\text{E}+03$ pCi/L in well FSB119D. Nitrate-nitrite as nitrogen was elevated in 18 FSB wells, with a maximum concentration of $240,000\text{ }\mu\text{g/L}$ in well FSB 79. Nonvolatile beta also was elevated in 18 FSB wells, with a maximum activity of $2.8\text{E}+03$ pCi/L in well FSB 78.

ALPHASUM, the sum of the activities of the alpha-emitting radionuclides (americium-241, curium-242, curium-243/244, curium-245/246, plutonium-238, plutonium-239/240, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235, and uranium-238), was elevated in 14 FSB wells, with a maximum activity of $1.7\text{E}+03$ pCi/L in well FSB 94DR. BETASUM, the sum of the activities of the beta-emitting radionuclides cesium-137, cobalt-60, iodine-129, radium-228, strontium-90, and technetium-99, was elevated in 13 FSB wells, with a maximum activity of $1.8\text{E}+03$ pCi/L in well FSB110D. Strontium-90 and total alpha-emitting radium also were elevated in 13 FSB wells; strontium-90 had a maximum activity of $1.4\text{E}+03$ pCi/L in well FSB110D, and total alpha-emitting radium had a maximum activity of $1.4\text{E}+02$ pCi/L in well FSB 92D. Cadmium, radium-226, and radium-228 were elevated in 10 FSB wells. Cadmium had a maximum concentration of $25\text{ }\mu\text{g/L}$ in well FSB 78, radium-226 had a maximum activity of $8.1\text{E}+01$ pCi/L in well FSB112D, and radium-228 had a maximum activity of $4.8\text{E}+01$ pCi/L in well FSB 94DR.

Lead was elevated in 8 FSB wells, and mercury was elevated in 4 FSB wells. Thallium was elevated in 2 FSB wells, and cobalt and trichloroethylene were elevated in 1 FSB well each.

Aquifer Zone IIB, (Barnwell/McBean), Third Quarter 1995

Twenty-two of the 32 Aquifer Zone IIB₁ (Barnwell/McBean) wells exhibited one or more parameters that exceeded the GWPS. No FSL wells are located in Aquifer Zone IIB₁ (Barnwell/McBean). Tritium was elevated in 22 FSB wells, with a maximum activity of $1.1\text{E}+04$ pCi/mL in wells FSB 79C, 95CR, and 97C.

Nitrate-nitrite as nitrogen was elevated in 17 FSB wells, with a maximum concentration of $300,000\text{ }\mu\text{g/L}$ in well FSB105C. Strontium-90 was elevated in 13 FSB wells, with a maximum activity of $1.9\text{E}+03$ pCi/L in well FSB 79C. BETASUM and nonvolatile beta were elevated in 12 FSB wells each; BETASUM had a maximum activity of $2.2\text{E}+03$ pCi/L in well FSB 79C, and nonvolatile beta had a maximum activity of $3.0\text{E}+03$ pCi/L in well FSB 79C. Gross alpha was elevated in 11 FSB wells, with a maximum activity of $8.8\text{E}+02$ pCi/L in well FSB 98C.

Total alpha-emitting radium was elevated in 10 FSB wells, and radium-226 was elevated in 9 FSB wells. Cadmium was elevated in 8 FSB wells. ALPHASUM, cobalt, and radium-228 were elevated in 6 FSB wells each. Lead, nickel, thallium, and trichloroethylene were elevated in 2 FSB wells each. Phenols and trichlorofluoromethane were elevated in 1 FSB well each during third quarter 1995.

Aquifer Unit IIA (Congaree), Third Quarter 1995

Eleven of the 15 wells in the upper portion of Aquifer Unit IIA (Congaree) exhibited one or more parameters that exceeded the GWPS during third quarter 1995. No FSL wells are located in the upper portion of Aquifer Unit IIA. Tritium was elevated in 11 FSB wells, with a maximum activity of $3.7\text{E}+02$ pCi/mL in well FSB 97A. Nitrate-nitrite as nitrogen was elevated in 3 FSB wells, and strontium-90 was elevated in 1 FSB well. No other constituents exceeded standards in these wells during third quarter 1995.

None of the 4 FSB wells in the lower portion of Aquifer Unit IIA contained constituents that exceeded GWPS. No FSL wells are located in the lower portion of Aquifer Unit IIA.

Aquifer Zone IIB₂ (Water Table), Fourth Quarter 1995

During fourth quarter 1995, the 36 FSB wells in Aquifer Zone IIB₂ (Water Table) were sampled for a reduced number of constituents. The 9 FSL wells in Aquifer Zone IIB₂ were sampled during fourth quarter 1995. Twenty-six FSB wells and all 9 FSL wells in Aquifer Zone IIB₂ exhibited one or more parameters that exceeded the GWPS during fourth quarter 1995.

Tritium was elevated in 24 FSB wells, with a maximum activity of 2.2E+04 pCi/mL in well FSB 79, and in 7 FSL wells, with a maximum activity of 1.1E+03 pCi/mL in well FSL 7D. Nitrate-nitrite as nitrogen was elevated in 20 FSB wells, with a maximum concentration of 350,000 µg/L in well FSB 79, and in 4 FSL wells, with a maximum concentration of 73,000 µg/L in well FSL 7D. Nonvolatile beta was elevated in 20 FSB wells, with a maximum activity of 2.2E+03 pCi/L in well FSB112D, and in 3 FSL wells, with a maximum activity of 4.6E+02 pCi/L in well FSL 5D. Gross alpha was elevated in 20 FSB wells, with a maximum activity of 1.0E+03 pCi/L in well FSB 97D, and in 2 FSL wells, with a maximum activity of 4.4E+01 pCi/L in well FSL 7D. Cadmium was elevated in 10 FSB wells and no FSL wells, and lead was elevated in 9 FSB wells and 5 FSL wells.

Trichlorofluoromethane was elevated in 3 FSL wells, and benzene, total alpha-emitting radium, and trichloroethylene were elevated in 1 FSL well each. These constituents were not analyzed in FSB wells during fourth quarter 1995.

Aquifer Zone IIB₁ (Barnwell/McBean), Fourth Quarter 1995

During fourth quarter 1995, the 32 FSB wells in Aquifer Zone IIB₁ (Barnwell/McBean) were sampled for a reduced number of constituents. No FSL wells are located in Aquifer Zone IIB₁. Twenty-six FSB wells in Aquifer Zone IIB₁ had one or more parameters that exceeded the GWPS.

Tritium was elevated in 26 FSB wells, with a maximum activity of 1.1E+04 pCi/mL in wells FSB 79C and 95CR. Nitrate-nitrite as nitrogen was elevated in 20 FSB wells, with a maximum concentration of 280,000 µg/L in well FSB 94C. Nonvolatile beta was elevated in 15 FSB wells, with a maximum activity of 2.4E+03 pCi/L in well FSB 79C. Gross alpha was elevated in 11 FSB wells, with a maximum activity of 9.4E+02 pCi/L in well FSB 98C. Cadmium was elevated in 9 FSB wells, and lead was elevated in 1 FSB well.

Aquifer Unit IIA (Congaree), Fourth Quarter 1995

Ten of the 15 FSB wells in the upper portion of Aquifer Unit IIA (Congaree) exhibited one or more parameters that exceeded the GWPS. No FSL wells are located in the upper portion of Aquifer Unit IIA. Tritium was elevated in 10 FSB wells, with a maximum activity of 4.3E+02 pCi/mL in well FSB120A. Nitrate-nitrite as nitrogen was elevated in 1 FSB well.

None of the 4 FSB wells in the lower portion of Aquifer Unit IIA contained constituents that exceeded GWPS. No FSL wells are located in the lower portion of Aquifer Unit IIA.

Results for analytes that exceeded the SRS Flag 2 criteria (Appendix B) during third and fourth quarters 1995 are summarized in Table D-2 (Appendix D, Volume I).

Table D-3 (Appendix D, Volume I) shows water elevations at sampling time, field parameters results, synchronous water elevations, and laboratory analytical data for all FSB and FSL wells as required in permit section IIIC.H.11.c.i. Table D-3 also identifies the results that received modifiers (which help define laboratory accuracy and precision) or that exceeded EPA-approved holding times, the GWPS, or SRS flagging criteria during third and fourth quarters 1995.

Constituent results in Table D-3 that appear to equal the GWPS but are not marked in the ST column (exceeded GWPS) are below the GWPS in the database. Database results, which are the results compared to the GWPS, have more significant digits than the results given in this report. Apparent discrepancies are due to the rounding of reported results.

In addition to the results tables, Appendix D provides definitions of the abbreviations and the modifiers used in the results tables as well as descriptions of holding times, data rounding, and data qualification practices.

Appendix E provides a general assessment of the quality and usability of EPD/EMS data.

Appendix IX Results

During the third quarter of each year, samples from 20 percent of the POC wells are analyzed for Appendix IX constituents (SCDHEC, 1994). Constituents detected above their sample quantitation limits are re-analyzed in subsequent quarters and statistically compared to background concentrations to determine if they are true contaminants or artifacts of the analyses.

During third quarter 1995, groundwater from POC wells FSB 91C, 92D, 94DR, 95DR, 97A, and 97C were analyzed for Appendix IX constituents.

Acetone, benzyl alcohol, beryllium, bromomethane, carbon tetrachloride, chloroform, chloromethane, di-n-butyl phthalate, 1,1-dichloroethylene, trans-1,2-dichloroethylene, 2,4-dichlorophenoxyacetic acid, 2-hexanone, methyl ethyl ketone, methyl isobutyl ketone, toluene, 2,4,5-T, and xylenes, which are not currently listed in Appendix IIID-A of the renewal permit, exceeded their sample quantitation limits in one or more wells (Table D-4, Appendix D, Volume I).

Maps and Time Series Plots

Isoconcentration maps for cadmium, gross alpha, lead, nitrate-nitrite as nitrogen, nonvolatile beta, strontium-90, technetium-99, tritium, uranium-233/234, and uranium-238 in the three hydrostratigraphic units during third quarter 1995 are presented in Figures 8 through 37 (Appendix C, Volume I). Third quarter 1995 data were used for all constituents because most of the constituents were not analyzed for during fourth quarter 1995. Piezometric and potentiometric surface maps for the monitored water-bearing units during third and fourth quarters 1995 are located in Figures 38 through 43 (Appendix C, Volume I). Isoconcentration maps are required by Section IIIC.H.11.c.iv of the permit; piezometric and potentiometric surface maps are required by Section IIIC.H.11.c.v of the permit.

Isoconcentration cross-sections for cadmium, gross alpha, lead, nitrate-nitrite as nitrogen, nonvolatile beta, strontium-90, technetium-99, tritium, uranium-234, and uranium-238 for third quarter 1995 and potentiometric cross-sections for fourth quarter 1995 are located in Volume II of this report. Isoconcentration and potentiometric cross-sections are required by Section IIIC.H.11.c.vi of the permit.

Synchronous water elevations were used to construct the piezometric and potentiometric maps and cross-sections. Synchronous water elevations are measured over as short a time period as possible; thus, other field measurements and sampling for laboratory analyses are not conducted when these measurements are made. This short time period allows the production of steady-state piezometric and potentiometric maps by minimizing the variation in water elevations that could occur, for example, if some elevations were measured before a large rain and the remaining elevations were measured after the rain.

Synchronous water elevations were measured on August 9 and 10 during third quarter 1995 and on November 14 during fourth quarter 1995 in compliance with permit condition IIID.H.7 (SCDHEC, 1995). Water elevations were not determined for some wells because low water content prevented water from rising in the standpipe where elevation measurements are taken. Well FSB 90D had no water in its standpipe during third and fourth quarters, and well FSB 87D had no water in its standpipe during fourth quarter.

Appendix F contains time series plots for cadmium, gross alpha, lead, nitrate-nitrite as nitrogen, nonvolatile beta, strontium-90, technetium-99, tritium, uranium-233/234, and uranium-238, as required in section IIIC.H.11.c.iii of the permit, for selected FSB 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.

Water Levels

Rainfall data for the period of this report, required by section IIIC.H.11.c.xiii of the permit, are presented below. Rainfall per month in F Area (200-F) for the second half of 1995 is compared with the SRS average monthly rainfall for the same period and to the SRS historical average monthly rainfall.

Table 1. Rainfall (in.) during Third and Fourth Quarters of 1995

	F-Area (200-F) Rainfall/Month (1995)	SRS Average Rainfall/Month (1995)	SRS Average Rainfall/Month (historical)
July	4.27	5.71	5.21
August	6.69	6.92	4.99
September	5.42	5.75	3.86
October	2.31	2.64	3.11
November	2.13	2.38	2.69
December	3.89	4.47	3.56
Six-month total	24.71	27.87	23.42

Hydrographs showing the water elevations for the FSB and FSL wells, required by section IIIC.H.11.c.ii of the permit, are provided in Appendix G. Hydrograph data include synchronous measurements and measurements taken during sampling. Average water elevations in the three hydrostratigraphic units beneath the F-Area HWMF for the past four quarters are shown in the following table.

Table 2. Average Water Elevations (ft msl) in the Hydrostratigraphic Units beneath the F-Area HWMF

Unit	1Q95	2Q95	3Q95	4Q95
Aquifer Zone IIB ₂ (Water Table)	212.56	211.94	211.87	212.26
Aquifer Zone IIB ₁ (Barnwell/McBean)	206.13	206.15	206.23	205.66
Aquifer Unit IIA (Congaree, upper portion)	154.19 ^a	154.51	160.00 ^b	154.84 ^b
Aquifer Unit IIA (Congaree, lower portion)	156.51	156.51		

^a The water-level measurement for well FSB113A for first quarter 1995 was anomalous and was not used in average water-level calculations.

^b Average includes water elevations from wells in the upper and lower portions of Aquifer Unit IIA (Congaree).

During third quarter 1995, the average water elevation in Aquifer Zone IIB₂ (Water Table) fell 0.07 ft compared to second quarter 1995; the average water level in Aquifer Zone IIB₁ (Barnwell/McBean) rose 0.8 ft; and the average water level in Aquifer Unit IIA (Congaree) rose 5.49 ft compared to the upper portion of Aquifer Unit IIA (Congaree) and 3.49 compared to the lower portion of Aquifer Unit IIA (Congaree) in second quarter 1995.

During fourth quarter 1995, the average water elevation in Aquifer Zone IIB₂ (Water Table) increased 0.39 ft compared to third quarter 1995; the average water level in Aquifer Zone IIB₁ (Barnwell/McBean) fell 0.57 ft; and the average water level in Aquifer Unit IIA (Congaree) fell 5.16 ft.

A consistent vertical head relationship exists among the hydrostratigraphic units monitored at the F-Area HWMF (WSRC, 1992a). 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 among the different monitored units has remained essentially unchanged through past quarters.

Groundwater Flow Rates and Directions

Piezometric and potentiometric maps for the monitored water-bearing units (Figures 38 through 43, Appendix C, Volume I) illustrate flow patterns beneath the F-Area HWMF for third and fourth quarters 1995. Large piezometric and potentiometric maps for each hydrostratigraphic unit during third and fourth quarters of 1995 are located in Volume II of this report. Calculations for Aquifer Unit IIA (Congaree) were derived using wells in the upper portion of this unit.

In the past, when SRS grid coordinates were used, flows in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (Barnwell/McBean) were generally reported as south or south-southwest toward Fourmile Branch. Using universal transverse Mercator (UTM) coordinates, flow in Aquifer Zone IIB₂ (Water Table) was south or south to southeast and flow in Aquifer Zone IIB₁ (Barnwell/McBean) was south or south to southeast during third and fourth quarters 1995. Flow in Aquifer Unit IIA (Congaree) was northwest toward Upper Three Runs Creek, consistent with the direction reported in previous quarters.

Horizontal flow rate estimates for the hydrostratigraphic units during third and fourth quarters are provided in the following table.

Table 3. Horizontal Groundwater Flow Rates (ft/year) in the Hydrostratigraphic Units beneath the F-Area HWMF

Unit	3Q95	4Q95
Aquifer Zone IIB ₂ (Water Table)	99–110	95–110
Aquifer Zone IIB ₁ (Barnwell/McBean)	77–180	66–180
Aquifer Unit IIA (Congaree)	660	550

Horizontal flow rate calculations provide 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 (designated flow paths A and B) to characterize the approximate maximum and minimum groundwater flow rates within these units in areas downgradient from 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:

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

The hydraulic conductivity (K_h) constant for Aquifer Zone IIB₂ (Water Table) is 10 ft/day; for Aquifer Zone IIB₁ (Barnwell/McBean), K_h is 10.4 ft/day; and for Aquifer Unit IIA (Congaree), K_h is 65 ft/day (Geraghty & Miller, 1990). An effective porosity value of 20 percent is used for each hydrostratigraphic unit (Jaegge et al., 1987). 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. 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.

Groundwater flow rates were calculated for third quarter 1995 as follows:

- Aquifer Zone IIB₂ (Water Table) (Figure 38, Appendix C, Volume I)

Flow path A

$$\frac{10}{0.20} \times \frac{10}{2,100} \approx 0.24 \text{ ft/day}$$

$$0.24 \text{ ft/day} \times 365 \text{ days} \approx 88 \text{ ft/year}$$

Flow path B

$$\frac{10}{0.20} \times \frac{10}{2,500} \approx 0.21 \text{ ft/day}$$

$$0.21 \text{ ft/day} \times 365 \text{ days} \approx 77 \text{ ft/year}$$

- Aquifer Zone IIB₁ (Barnwell/McBean) (Figure 40, Appendix C, Volume I)

Flow path A

$$\frac{10.4}{0.20} \times \frac{14}{1,450} \approx 0.50 \text{ ft/day}$$

$$0.50 \text{ ft/day} \times 365 \text{ days} \approx 180 \text{ ft/year}$$

Flow path B

$$\frac{10.4}{0.20} \times \frac{16}{1,450} \approx 0.57 \text{ ft/day}$$

$$0.57 \text{ ft/day} \times 365 \text{ days} \approx 210 \text{ ft/year}$$

- Aquifer Unit IIA (Congaree) (Figure 42, Appendix C, Volume I)

$$\frac{65}{0.20} \times \frac{7}{1,250} \approx 1.8 \text{ ft/day}$$

$$1.8 \text{ ft/day} \times 365 \text{ days} \approx 660 \text{ ft/year}$$

Groundwater flow rates were calculated for fourth quarter 1995 as follows:

- Aquifer Zone IIB₂ (Water Table) (Figure 39, Appendix C, Volume I)

Flow path A

$$\frac{10}{0.20} \times \frac{10}{1,900} \approx 0.26 \text{ ft/day}$$

$$0.26 \text{ ft/day} \times 365 \text{ days} \approx 95 \text{ ft/year}$$

Flow path B

$$\frac{10}{0.20} \times \frac{12}{2,000} \approx 0.30 \text{ ft/day}$$

$$0.30 \text{ ft/day} \times 365 \text{ days} \approx 110 \text{ ft/year}$$

- Aquifer Zone IIB₁ (Barnwell/McBean) (Figure 41, Appendix C, Volume I)

Flow path A

$$\frac{10.4}{0.20} \times \frac{10}{2,850} \approx 0.18 \text{ ft/day}$$

$$0.18 \text{ ft/day} \times 365 \text{ days} \approx 66 \text{ ft/year}$$

Flow path B

$$\frac{10.4}{0.20} \times \frac{14}{1,500} \approx 0.49 \text{ ft/day}$$

$$0.49 \text{ ft/day} \times 365 \text{ days} \approx 180 \text{ ft/year}$$

- Aquifer Unit IIA (Congaree) (Figure 43, Appendix C, Volume I)

$$\frac{65}{0.20} \times \frac{7}{1,500} \approx 1.5 \text{ ft/day}$$

$$1.5 \text{ ft/day} \times 365 \text{ days} \approx 550 \text{ ft/year}$$

Upgradient and Background Results

Wells FSB108D and 109D are the upgradient wells for Aquifer Zone IIB₂ (Water Table) (Figure 5, Appendix C, Volume I). Although well FSB 76 lies upgradient of the facility, it is not considered an upgradient well because it is downgradient of a collapsed process sewer line that has contaminated the groundwater. Well FSB 76C is the upgradient well for Aquifer Zone IIB₁ (Barnwell/McBean) (Figure 6, Appendix C, Volume I). Wells FSB 78B, 79B, 112A, and 113A are upgradient wells for the upper portion of Aquifer Unit IIA (Congaree), and wells FSB 78A and 79A are upgradient wells for the lower portion of Aquifer Unit IIA (Congaree) (Figure 7, Appendix C, Volume I).

During the second half of 1995, upgradient wells FSB 78B, 79B, 109D, 112A, and 113A contained elevated levels of tritium. Upgradient well FSB109D contained elevated levels of lead, and upgradient well FSB 78B contained elevated levels of nitrate-nitrite as nitrogen. Upgradient well FSB112A contained elevated levels of strontium-90.

Wells FSB 76C and 108D and well HSB 85A are the background wells for the F-Area HWMF. No parameters exceeded GWPS in the background wells during the second half of 1995.

Conclusions

The groundwater at the F-Area HWMF contains elevated levels of radionuclides and chemicals from 30 years of receiving contaminated wastewater from the F-Area Separations Area. During the second half of 1995, 19 parameters exceeded the GWPS in wells at the F-Area HWMF. Elevated constituents occurred in 66 of the 86 FSB wells and all 9 FSL wells monitoring the F-Area HWMF.

Cadmium and lead were the primary metals that exceeded the GWPS during the second half of 1995, elevated in 22 and 18 wells, respectively. Cadmium occurred at a maximum concentration of 38 $\mu\text{g/L}$ in well FSB112C during fourth quarter 1995, and lead was found at a maximum concentration of 120 $\mu\text{g/L}$ in well FSB106D during fourth quarter 1995. Cobalt, mercury, nickel, and thallium also exceeded the GWPS in one or more FSB wells during the second half of 1995.

Nitrate-nitrite as nitrogen exceeded the GWPS in numerous FSB wells and 4 FSL wells during the second half of 1995. Benzene, phenols, trichloroethylene, and trichlorofluoromethane exceeded GWPS in 4 or fewer wells each during the second half of 1995.

During the second half of 1995, all radionuclides and radionuclide indicators with GWPS were detected above GWPS at the F-Area HWMF. These radionuclides and radionuclide indicators include ALPHASUM, BETASUM, gross alpha, nonvolatile beta, radium-226, radium-228, strontium-90, and total alpha-emitting radium. Each was elevated in 16 or more F-Area HWMF wells. Tritium was the primary radionuclide detected above GWPS; it was elevated in 69 (72%) of the wells monitoring the F-Area HWMF, with a maximum activity of $2.2\text{E}+04$ pCi/mL in well FSB 79 during fourth quarter 1995. Other maximum activities, which were all detected during third quarter 1995, were as follows: ALPHASUM at $1.7\text{E}+03$ pCi/L in well FSB 94DR, BETASUM at $2.2\text{E}+03$ pCi/L in well FSB 79C, gross alpha at $1.3\text{E}+03$ pCi/L in well FSB119D, nonvolatile beta at $3.0\text{E}+03$ pCi/L in well FSB 79C, radium-226 at $1.1\text{E}+02$ pCi/L in wells FSB 95CR and 112C, radium-228 at $4.8\text{E}+01$ pCi/L in well FSB 94DR, strontium-90 at $1.9\text{E}+03$ pCi/L in well FSB 79C, and total alpha-emitting radium at $1.5\text{E}+02$ pCi/L in well FSB 95CR.

As in previous quarters, elevated constituents were found primarily in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (Barnwell/McBean). Also as in previous quarters, several constituents at levels exceeding the GWPS occurred in one or more FSB wells in Aquifer Unit IIA (Congaree), indicating that vertical pathways into the deeper water-bearing units exist at the F-Area HWMF. A current groundwater flow model for the Separations Area indicates that the vertical component beneath this area is important as a constituent pathway (GeoTrans, Inc., 1992).

During the second half of 1995, upgradient FSB wells contained elevated levels of lead, nitrate-nitrite as nitrogen, strontium-90, or tritium. Downgradient FSB wells contained elevated levels of numerous metals and radionuclides and several other constituents. Generally, constituents found in wells upgradient of a waste management unit are considered to be from a source other than the waste management unit; constituents found in downgradient wells but not in upgradient wells at a waste management unit are considered products of the waste management unit.

Groundwater flow directions beneath the F-Area HWMF have remained relatively unchanged for several years. Flow in Aquifer Zone IIB₂ (Water Table) and Aquifer Zone IIB₁ (Barnwell/McBean)

is generally south to southeast toward Fourmile Branch (using UTM coordinates). Flow in Aquifer Unit IIA (Congaree) is generally northwest toward Upper Three Runs Creek.

The estimated groundwater flow rate during third quarter 1995 ranged from approximately 99 to 110 ft/year and during fourth quarter 1995 from approximately 95 to 110 ft/year in Aquifer Zone IIB₂ (Water Table). The flow rate in Aquifer Zone IIB₁ (Barnwell/McBean) ranged from approximately 77 to 180 ft/year during third quarter 1995 and from approximately 66 to 180 ft/year during fourth quarter 1995. The flow rate in Aquifer Unit IIA (Congaree) was estimated at 660 ft/year during third quarter 1995 and 550 ft/year during fourth quarter 1995.

References Cited

Aadland, R. K., and H. W. Bledsoe, 1990. **Classification of Hydrostratigraphic Units at the Savannah River Site, South Carolina**, WSRC-RP-90-987. Westinghouse Savannah River Company, Savannah River Site, Aiken, SC.

EPD/EMS (Environmental Protection Department/Environmental Monitoring Section), 1995. **Environmental Protection Department's Well Inventory (through the second quarter of 1995)**, ESH-EMS-950419. Westinghouse Savannah River Company, Savannah River Site, Aiken, SC.

GeoTrans, Inc., 1992. **Groundwater Flow Model for the General Separations Area, Savannah River Site**. Prepared for Westinghouse Savannah River Company, Environmental Restoration Department, Savannah River Site, Aiken, SC.

Geraghty & Miller, Inc., 1990. **Evaluation of Integrated Waste Facility Closure Capping on Ground-Water Flow and Solute Transport in General Separations Area, Savannah River Site: Flow Model and Particle-Tracking Analysis, Final Report**. Prepared by Geraghty & Miller Modeling Group for Westinghouse Savannah River Company, Waste Management Technology, Savannah River Site, Aiken, SC.

Heffner, J. D., and Exploration Resources, Inc., 1991. **Technical Summary of Groundwater Quality Protection Program at the Savannah River Site (1952-1986), Volume I—Site Geohydrology and Waste Sites**, DPSP-88-1002. Westinghouse Savannah River Company, Savannah River Site, Aiken, SC.

Jaegge, W. J., N. L. Kolb, B. B. Looney, I. W. Marine, O. A. Towler, and J. R. Cook, 1987. **Radioactive Waste Burial Grounds**, DPST-85-694. Savannah River Laboratory, E. I. du Pont de Nemours & Company, Aiken, SC.

SCDHEC (South Carolina Department of Health and Environmental Control), 1992. **Hazardous Waste Permit Modification, Permit No. SC1-890-008-989**. Office of Environmental Quality Control, Bureau of Solid and Hazardous Waste Management, Columbia, SC.

SCDHEC (South Carolina Department of Health and Environmental Control), 1994. **South Carolina Hazardous Waste Management Regulations**; R.61-79.124, .260 through .266, .268, and .270; December 1994. Columbia, SC.

SCDHEC (South Carolina Department of Health and Environmental), 1995. **1995 RCRA Renewal Permit, SC1-890-008-989**, Revision 0. Columbia, SC.

WSRC (Westinghouse Savannah River Company), 1990. **Application for a Hazardous Waste Part B Post-Closure Care Permit. Volume IV. F-Area Hazardous Waste Management Facility**. Revision 2, December 3, 1990. Savannah River Site, Aiken, SC.

WSRC (Westinghouse Savannah River Company), 1992a. **Application for a Hazardous Waste Part B Post-Closure Care Permit. Volume IV. F-Area Hazardous Waste Management Facility**. Revision 3, March 13, 1992. Savannah River Site, Aiken, SC.

WSRC (Westinghouse Savannah River Company), 1992b. *Sampling Groundwater Monitoring Wells, Hydrogeologic Data Collection Procedures and Specifications*, Manual 3Q5, Rev. 1, Chapter 15. Savannah River Site, Aiken, SC.

Errata

Samples for field data are collected once each quarter, but samples for analytical data may be collected more than once each quarter. Thus, because the results tables present the highest analytical result for the quarter, the reported analytical result may be from a sample collected on a different date from the date the field data sample was collected.

Third Quarter 1994:

- Modifiers for the following analyses in Table 3 (Appendix D, Volume I) were not assigned correctly for some wells as follows: laboratory pH values should have had holding time indicators and measured radionuclides with a result of 0.0E+00 preceded by a less than (<) sign should have had UI modifiers instead of the less than sign.
- Volume II: The large isoconcentration maps included with the report had the incorrect document numbers listed in the map legends. The correct document numbers are WSRC-TR-94-0487 and WSRC-TR-94-0488, F-Area and H-Area, respectively.

First and Second Quarters 1995:

- No errata have been reported.

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 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 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 FSL 8D

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well FSL 5D

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=Bamwell (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 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 1D

Note: W=Water Table (IB2); B=Bartwell (IB1); M=McBean (IB1); 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 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 FSB121

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Third and Fourth Quarters 1995

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 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 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 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 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)

FSB

Third and Fourth Quarters 1995

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 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 FSB113

Note: W=Water Table (IIB2); B=Barmwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well Cluster FSB112

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 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 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 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 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 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 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 FSB104

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 FSB102C

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

FSB

Third and Fourth Quarters 1995

Hydrograph Well FSB101A

Note: W=Water Table (IB2); B=Bartwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

FSB

Third and Fourth Quarters 1995

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 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 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 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 96

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 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 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 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 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 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 89

Note: W=Water Table (IIB2); B=Barrowell (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=Bamwell (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 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 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 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)

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)

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Appendix G

Hydrographs

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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)

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 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 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 95

Unconnected lines indicate a dry well or a value below the detection limit.

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Uranium-238 Activities Well Cluster FSB 94

Unconnected lines indicate
a dry well or a value below
the detection limit.

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 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 FSB107

Unconnected lines indicate a dry well or a value below the detection limit.

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 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 FSB 97

Unconnected lines indicate a dry well or a value below the detection limit.

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Uranium-233/234 Activities Well Cluster FSB 95

Note: W=Water Table (IIB2); B=Barwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Uranium-233/234 Activities Well Cluster 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-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 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 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)

Tritium Activities Well Cluster FSB122

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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 FSB120

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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

Tritium Activities Well Cluster FSB107

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

—▲— FSB102C (B)

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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 97

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 20 pCi/mL

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)

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 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 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 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 95

Note: W=Water Table (IIB2); B=Barmwell (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 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 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 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 FSB112

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 8 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)

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 FSB102C

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 8 pCi/L

—▲— FSB102C (B)

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 8 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)

Strontium-90 Activities Well Cluster FSB 97

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 8 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)

Strontium-90 Activities Well Cluster FSB 95

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 8 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)

Strontium-90 Activities Well Cluster FSB 94

Unconnected lines indicate
a dry well or a value below
the detection limit.

PDWS 8 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)

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 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 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 FSB112

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 FSB110C

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 50 pCi/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 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 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 95

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 50 pCi/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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 FSB 92D

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 FSB 78C

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 50 pCi/L

FSB 78C (B)

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 10,000 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Nitrate Concentrations Well Cluster FSB120

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Nitrate Concentrations Well FSB119D

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 10,000 µg/L

—■— FSB119D (W)

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 lines indicate
a dry well or a value below
the detection limit.

GWPS 10,000 µg/L

—■— FSB117D (W)

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

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 lines indicate
a dry well or a value below
the detection limit.

GWPS 10,000 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Nitrate Concentrations Well FSB102C

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 lines indicate
a dry well or a value below
the detection limit.

GWPS 10,000 µg/L

—■— FSB 91D (W)

Note: W=Water Table (IIB2); B=Bamwell (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 Cluster FSB 87

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 10,000 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Lead Concentrations Well FSB119D

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 15 µg/L

—■— FSB119D (W)

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 15 µg/L

—■— FSB108D (W)

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 FSB 95DR

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 15 $\mu\text{g/L}$

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 90D

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 15 µg/L

—■— FSB 90D (W)

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

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 15 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Lead Concentrations Well FSB 77

Unconnected lines indicate
a dry well or a value below
the detection limit.

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Lead Concentrations Well FSB 76

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Gross Alpha Activities Well Cluster FSB107

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 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)

Gross Alpha Activities Well Cluster FSB104

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Gross Alpha Activities Well Cluster 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 FSB 97

Note: W=Water Table (IIB2); B=Barrow (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 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 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 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 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)

Cadmium Concentrations Well FSB119D

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 5 $\mu\text{g/L}$

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Cadmium Concentrations Well FSB112C

Note: W=Water Table (IIB2); B=Barrowell (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 Cluster FSB104

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 5 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Cadmium Concentrations Well FSB102C

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 5 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Cadmium Concentrations Well FSB 95CR

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 5 $\mu\text{g/L}$

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 91D

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 5 µg/L

—■— FSB 91D (W)

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 FSB 79

Unconnected lines indicate
a dry well or a value below
the detection limit.

GWPS 5 µg/L

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

F AREA SEEPAGE BASINS HYDROSTR

ATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCAREOUS SAND
- CALCAREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- 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

SCALE
 HORIZONTAL 0 100 200
 VERTICAL 0 5 10 15 20

SR0023R2	REV. 2	REV. DATE 93	DATE 93
SAFETY RESPONSIBILITY SECURITY		ENVIRONMENTAL RESTORATION	
SRS		E R	
SAVANNAH RIVER SITE		Protecting the Environment Today for a Cleaner Tomorrow	
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A			
DATE 93	CREATED BY ROD BOLT	DATE 93	APPROVED BY C. M. LEWIS
DATE 93	PREPARED BY TRACY MOXLEY	DATE 93	APPROVED BY T. F. CAUGHAN
DATE 93	APPROVED BY R. A. LAMOND	DATE 93	APPROVED BY T. M. WESTBROOK
DATE 93	APPROVED BY M. K. HARRIS	DATE 93	APPROVED BY C. Y. THOMPSON

REV	DATE	DESCRIPTION	BY	CHK
1	1993	HYDRO CROSS-SECTION	ROD BOLT	
2	1993	HYDRO CROSS-SECTION	TRACY MOXLEY	
3	1993	HYDRO WELL CHANGES	R. A. LAMOND	
4	1993	HYDRO CROSS-SECTION	M. K. HARRIS	

F AREA SEEPAGE BASINS HYDROST

STRATIGRAPHIC CROSS - SECTION A

LEGEND:

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

DATE: 9/20/92	REV: 2	REV DATE: 9/3	AREA: GSA																																						
<p>F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A</p>																																									
<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>DATE</th> </tr> <tr> <td>1</td> <td>9/20/92</td> <td>REVISED CROSS-SECTION</td> <td>ROD HOLY</td> <td>9/3</td> </tr> <tr> <td>2</td> <td>9/20/92</td> <td>REVISED CROSS-SECTION</td> <td>TRACY MCKLEY</td> <td>9/3</td> </tr> <tr> <td>3</td> <td>9/20/92</td> <td>REVISED CROSS-SECTION</td> <td>ST. ANGLAND</td> <td>9/3</td> </tr> <tr> <td>4</td> <td>9/20/92</td> <td>REVISED CROSS-SECTION</td> <td>M. E. HARRIS</td> <td>9/3</td> </tr> </table>	NO.	DATE	DESCRIPTION	BY	DATE	1	9/20/92	REVISED CROSS-SECTION	ROD HOLY	9/3	2	9/20/92	REVISED CROSS-SECTION	TRACY MCKLEY	9/3	3	9/20/92	REVISED CROSS-SECTION	ST. ANGLAND	9/3	4	9/20/92	REVISED CROSS-SECTION	M. E. HARRIS	9/3	<table border="1"> <tr> <th>DATE</th> <th>APPROVED BY</th> <th>DATE</th> </tr> <tr> <td>9/3</td> <td>C. M. LEWIS</td> <td>9/3</td> </tr> <tr> <td>9/3</td> <td>T. F. CAUGHAN</td> <td>9/3</td> </tr> <tr> <td>9/3</td> <td>T. M. WESTBROOK</td> <td>9/3</td> </tr> <tr> <td>9/3</td> <td>C. Y. THOMPSON</td> <td>6-15-93</td> </tr> </table>	DATE	APPROVED BY	DATE	9/3	C. M. LEWIS	9/3	9/3	T. F. CAUGHAN	9/3	9/3	T. M. WESTBROOK	9/3	9/3	C. Y. THOMPSON	6-15-93
NO.	DATE	DESCRIPTION	BY	DATE																																					
1	9/20/92	REVISED CROSS-SECTION	ROD HOLY	9/3																																					
2	9/20/92	REVISED CROSS-SECTION	TRACY MCKLEY	9/3																																					
3	9/20/92	REVISED CROSS-SECTION	ST. ANGLAND	9/3																																					
4	9/20/92	REVISED CROSS-SECTION	M. E. HARRIS	9/3																																					
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9/3	T. F. CAUGHAN	9/3																																							
9/3	T. M. WESTBROOK	9/3																																							
9/3	C. Y. THOMPSON	6-15-93																																							

F AREA SEEPAGE BASINS HYDROSTR

HYDROSTRATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCAREOUS SAND
- CALCAREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- 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

SCALE
 HORIZONTAL 0 100 200
 VERTICAL 0 5 10 15 20

DATE	REV.	REV. DATE	AREA
SF0023R2	2	93	GSA
SAFETY, REPORTEDLY - SECURITY		ENVIRONMENTAL RESTORATION	
SRS		E R	
SAVANNAH RIVER SITE		Protecting the Environment Today for a Cleaner Tomorrow	
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A			
DATE	BY	DATE	BY
1 1993	ROD BOLT	1 1993	C. M. LEWIS
1 1993	ROD BOLT	1 1993	T. F. GAUGHAN
1 1993	TRACY WICKLEY	1 1993	T. M. WESTBROOK
1 1993	R. ANDLAND	1 1993	C. Y. THOMPSON
1 1993	M. K. HARRIS	1 1993	

NO.	DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY	DATE
1	1993	HYDRO CROSS-SECTION	ROD BOLT	1993	DESIGNED BY	C. M. LEWIS	1993
2	1993	HYDRO CROSS-SECTION	ROD BOLT	1993	APPROVED BY	T. F. GAUGHAN	1993
3	1993	HYDRO WELL SCREEN	TRACY WICKLEY	1993	APPROVED BY	T. M. WESTBROOK	1993
4	1993	HYDRO CROSS-SECTION	R. ANDLAND	1993	APPROVED BY	C. Y. THOMPSON	1993
5	1993	HYDRO CROSS-SECTION	M. K. HARRIS	1993			

F AREA SEEPAGE BASINS HYDROSTRATA

HYDROSTRATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCAREOUS SAND
- CALCAREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- 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

SCALE
 HORIZONTAL 0 100 200
 VERTICAL 0 5 10 15 20

FILE NO.	SF0023R2	REV. NO.	2	REV. DATE	93	AREA	GSA
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A							
DATE	10/92	REVISION	1	DATE	10/92	APPROVED BY	C. M. LEWIS
DATE	10/92	REVISION	2	DATE	10/92	APPROVED BY	T. F. GAUGHAN
DATE	10/92	REVISION	3	DATE	10/92	APPROVED BY	T. M. WESTBROOK
DATE	10/92	REVISION	4	DATE	10/92	APPROVED BY	C. Y. THOMPSON

REV	DATE	DESCRIPTION	BY	CHK	DATE	BY	CHK
1	10/92	HYDROSTRATIGRAPHIC CROSS-SECTION	ROD BOLT	CL	93	C. M. LEWIS	93
2	10/92	HYDROSTRATIGRAPHIC CROSS-SECTION	TRACY MCKLEY	CL	93	T. F. GAUGHAN	93
3	10/92	HYDROSTRATIGRAPHIC CROSS-SECTION	R. ANDLAND	CL	93	T. M. WESTBROOK	93
4	10/92	HYDROSTRATIGRAPHIC CROSS-SECTION	M. K. HARRIS	CL	93	C. Y. THOMPSON	6-15-93

F AREA SEEPAGE BASINS HYDROSTRE

HYDROSTRATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCREOUS SAND
- CALCREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- 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

SCALE
 HORIZONTAL 1" = 100' 200'
 VERTICAL 1" = 10' 15' 20'

DATE: 5/02/92	REV: 2	REV DATE: 93	AREA: GSA
SRS SAFETY • RESPONSIBILITY • SECURITY SAVANNAH RIVER SITE		ENVIRONMENTAL RESTORATION E R <i>Restoring the Environment Today for a Cleaner Tomorrow</i>	
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A			
DESIGNED BY: ROD BOLT	DATE: 93	APPROVED BY: C. M. LEWIS	DATE: 93
REVIEWED BY: TRACY MCKLEY	DATE: 93	APPROVED BY: T. F. GAUGHAN	DATE: 93
APPROVED BY: R. ANDLAND	DATE: 93	APPROVED BY: T. M. WESTBROOK	DATE: 93
APPROVED BY: M. K. HARRIS	DATE: 93	APPROVED BY: C. Y. THOMPSON	DATE: 6-15-93

REV	DATE	DESCRIPTION	BY	CHKD
1	10/92	REVISED CROSS-SECTION	ROD BOLT	C.M. LEWIS
2	10/92	REVISED CROSS-SECTION	TRACY MCKLEY	T.F. GAUGHAN
3	11/92	REVISED WELL SCREEN	R. ANDLAND	T.M. WESTBROOK
4	12/92	REVISED CROSS-SECTION	M.K. HARRIS	C.Y. THOMPSON

OLIGOCENE(?)/MIOCENE(?)

238' 278' 1158'

SCALE IS EXAGGERATED IN THIS AREA FOR CLARITY

SCALE IS EXAGGERATED IN THIS AREA FOR CLARITY

BASIN F2 PROJECTED

FS887 ELEV 285.6'

FS899 ELEV 285.3'

FS878 ELEV 291.8'

NS

0.56UI

1.0UI

2.3

NS

c NS

c 84

4.5

1.7

1.1UI

20

50

TO 261.8'

TO 269.8'

TO 276.8'

A

CALCAREOUS SAND
CALCAREOUS MUD
CLAYEY SAND
SAND
GRAVEL/PEBBLES
SILT/CLAY
SANDY LIMESTONE
LIMESTONE
SANDY MUDDY LIMESTONE
MUDDY LIMESTONE
SANDY CLAY
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

SCALE
HORIZONTAL 0 100 200
VERTICAL 0 5 10 15 20

DATE REC. FD0023P2	REV. NO. 2	REV. DATE 93	CLASS CSA
DUTY • RESPONSIBILITY • SECURITY SRS SATYANAM RIVER SITE		ENVIRONMENTAL RESTORATION <i>Protecting the Environment Today for a Cleaner Tomorrow!</i>	
FILE			
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A			
DESIGNED BY ROD BOLT	DATE 93	APPROVED BY C. M. LEWIS	DATE 93
PREPARED BY TRACY WICKLEY	DATE 93	APPROVED BY T. F. GAUGHAN	DATE 93
APPROVED BY R. ANGLAND	DATE 93	APPROVED BY T. M. WHITEBROOK	DATE 93
APPROVED BY M. K. HARRIS	DATE 93	APPROVED BY C. Y. DEANSON	DATE 6-15-93

[illegible]

OLIGOCENE(?) / MIOCENE(?)

HYDROSTRATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCAREOUS SAND
- CALCAREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- 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

SCALE
 HORIZONTAL 0 100 200
 VERTICAL 0 5 10 15 20

DATE SF002392	REV. NO. 2	REV. DATE 93	AREA GSA
SAVANNAH RIVER SITE		ENVIRONMENTAL RESTORATION	
SRS		E&R	
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A			
DATE 10-92	DESIGNED BY ROD BOLT	DATE 93	APPROVED BY C. M. LEWIS
DATE 10-92	DESIGNED BY TRACY WICKLEY	DATE 93	APPROVED BY T. F. GAUGHAN
DATE 93	APPROVED BY R. ANDLAND	DATE 93	APPROVED BY T. M. WESTBROOK
DATE 93	APPROVED BY M. K. HARRIS	DATE 93	APPROVED BY C. Y. THOMPSON

NO.	DATE	DESCRIPTION	BY	DATE
1	10-92	NOTES CROSS-SECTION	ROD BOLT	93
2	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
3	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
4	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
5	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
6	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
7	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
8	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
9	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93
10	10-92	NOTES WELL SCREEN	TRACY WICKLEY	93

F AREA SEEPAGE BASINS HYDROSTRAT

HYDROSTRATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCAREOUS SAND
- CALCAREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- 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

SCALE
HORIZONTAL 0 100 200
VERTICAL 0 10 15 20

DATE	REV. NO.	REV. DATE	AREA
5/00/2002	2	9/3	GSA
<p>SAVANNAH RIVER SITE</p> <p>ENVIRONMENTAL RESTORATION</p> <p>Reducing the Environmental Legacy for a Cleaner Tomorrow</p>			
<p>FILE</p> <p>F AREA SEEPAGE BASINS</p> <p>HYDROSTRATIGRAPHIC</p> <p>CROSS SECTION A</p>			
NO.	DATE	BY	DATE
1	5/00/2002	ROD BOLT	9/3
2	5/00/2002	TRACY WICKLEY	9/3
3	5/00/2002	R. ANDLAND	9/3
4	5/00/2002	M. K. HARRIS	9/3
5	5/00/2002	C. M. LEWIS	9/3
6	5/00/2002	T. F. GAUGHAN	9/3
7	5/00/2002	T. M. WESTBROOK	9/3
8	5/00/2002	C. V. THOMPSON	6-16-93

OLIGOCENE(?) / MIOCENE(?)

HYDROSTRATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCAREOUS SAND
- CALCAREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- SAND PACK INTERVAL - INCLUDES BENTONITE SEAL
- SCREENED INTERVAL

TD = TOTAL DEPTH
 CSA = 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

FILE NO. SF0023R2	REV. NO. 2	REV. DATE 93	SCALE CSA
SRS SAFETY • RESPONSIBILITY • SECURITY SAVANNAH RIVER SITE		ENVIRONMENTAL RESTORATION Restoring the Environment Today for a Cleaner Tomorrow	
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A			
DATE 1/94	REVISION 1.1	CREATED BY ROD BOLT	DATE 93
DATE 1/94	REVISION 1.2	APPROVED BY TRACY MCKLEY	DATE 93
DATE 1/94	REVISION 1.3	APPROVED BY R. ANGLAND	DATE 93
DATE 1/94	REVISION 1.4	APPROVED BY M. K. HARRIS	DATE 93
DATE 1/94	REVISION 1.5	APPROVED BY C. M. LEWIS	DATE 93
DATE 1/94	REVISION 1.6	APPROVED BY T. F. GAUGHAN	DATE 93
DATE 1/94	REVISION 1.7	APPROVED BY T. M. WESTBROOK	DATE 93
DATE 1/94	REVISION 1.8	APPROVED BY C. Y. THOMPSON	DATE 6-16-93

NO.	DATE	DESCRIPTION	BY	CHKD
1	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	ROD BOLT	
2	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	TRACY MCKLEY	
3	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	R. ANGLAND	
4	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	M. K. HARRIS	
5	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	C. M. LEWIS	
6	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	T. F. GAUGHAN	
7	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	T. M. WESTBROOK	
8	1/94	HYDROSTRATIGRAPHIC CROSS-SECTION A	C. Y. THOMPSON	

F AREA SEEPAGE BASINS HYDROSTRAT.

OLIGOCENE(?) / MIOCENE(?)

UPPER EOCENE

MIDDLE EOCENE

AQUIFER SYSTEM II

AQUIFER UNIT IIB

AQUIFER ZONE IIB₂

CONFINING ZONE IIB₁-IIB₂

AQUIFER ZONE IIB₁

CONFINING UNIT IIA-IIB

AQUIFER UNIT IIA

A

URANIUM-238 ACTIVITIES 3Q95

- WATER TABLE
- UNITS = $\mu\text{Ci/L}$
- NS NOT SAMPLED
- NA NOT ANALYZED
- UI ANALYTE NOT DETECTED, INSTRUMENT READING ISOCONCENTRATION
- 15- CONTOUR
- INFERRED CONTOUR
- CONTOUR INTERVALS: 15; 150; 500
- GROUNDWATER PROTECTION STANDARD = $15 \mu\text{Ci/L}$

Geological cross-section A-A' showing stratigraphic columns and structural features. The section is oriented North-South, with North at the top. The topographic profile is shown at the top, with elevations of 236', 278', 1150', and 291.5' (FS576). The section is divided into several stratigraphic columns, each with a well identifier and elevation: FS507 (Elev 285.6'), FS599 (Elev 285.3'), and FS576 (Elev 291.5'). The columns are labeled with lithological units: NS (Nashville), NA (Nashville), and A (Athens). The section shows a complex structural pattern with several faults, including a major fault labeled '15' and another labeled '15.3'. The section is also labeled with '0.057 UI' and '0.028 UI' (likely indicating a specific geological unit or feature). The section is oriented North-South, with North at the top. The topographic profile is shown at the top, with elevations of 236', 278', 1150', and 291.5' (FS576). The section is divided into several stratigraphic columns, each with a well identifier and elevation: FS507 (Elev 285.6'), FS599 (Elev 285.3'), and FS576 (Elev 291.5'). The columns are labeled with lithological units: NS (Nashville), NA (Nashville), and A (Athens). The section shows a complex structural pattern with several faults, including a major fault labeled '15' and another labeled '15.3'. The section is also labeled with '0.057 UI' and '0.028 UI' (likely indicating a specific geological unit or feature).

CALCAREOUS SAND
CALCAREOUS MUD
CLAYEY SAND
SAND
GRAVEL/PEBBLES
SILT/CLAY
SANDY LIMESTONE
LIMESTONE
SANDY MUDDY LIMESTONE
MUDDY LIMESTONE
SANDY CLAY
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

SCALE
HORIZONTAL 0 100 200
VERTICAL 0 5 10 15 20

DISC NO. SF0023P2	REV. NO. 2	REV. DATE 93	SCALE CSA
READY • RESPONSE READY • SECURITY SRS SAYAHNAN RIVER SITE		ENVIRONMENTAL RESTORATION <i>Protecting the Environment Today for a Cleaner Tomorrow</i>	
TITLE <p style="text-align: center;">F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A</p>			
CREATED BY ROD BOLT PREPARED BY TRACY WICKLEY APPROVED BY R. ANGLAND APPROVED BY M. K. HARRIS	DATE 93 DATE 93 DATE 93 DATE 93	APPROVED BY C. M. LEWIS APPROVED BY T. F. GAUGHAN APPROVED BY T. M. WESTBROOK APPROVED BY C. Y. THOMPSON	DATE 93 DATE 93 DATE 93 DATE 6-15-93

F AREA SEEPAGE BASINS HYDROSTR

HYDROSTRATIGRAPHIC CROSS - SECTION A

LEGEND:

- CALCREOUS SAND
- CALCREOUS MUD
- CLAYEY SAND
- SAND
- GRAVEL/PEBBLES
- SILT/CLAY
- SANDY LIMESTONE
- LIMESTONE
- SANDY MUDDY LIMESTONE
- MUDDY LIMESTONE
- SANDY CLAY
- 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

SCALE
 HORIZONTAL 1" = 150'
 VERTICAL 1" = 15'

DIS. NO. SF0023R2	REV. NO. 2	REV. DATE 93	FILE GSA
SAFETY • RESPONSIBILITY • SECURITY SRS SAVANNAH RIVER SITE		ENVIRONMENTAL RESTORATION E R Restoring the Environment Today for a Cleaner Tomorrow	
F AREA SEEPAGE BASINS HYDROSTRATIGRAPHIC CROSS SECTION A			
DATE 1/10/93	CHECKED BY ROD BOLT	DATE 93	APPROVED BY C. M. LEWIS
DATE 1/10/93	CHECKED BY TRACY WICKLEY	DATE 93	APPROVED BY T. F. GAUGHAN
DATE 1/10/93	CHECKED BY R. ADLAND	DATE 93	APPROVED BY T. M. WESTBROOK
DATE 1/10/93	CHECKED BY M. K. HARRIS	DATE 93	APPROVED BY C. Y. THOMPSON

Appendix A

Groundwater Protection Standard

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Table 1. Groundwater Protection Standard

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

<u>Analyte</u>	<u>Concentration/Activity Limit</u>	<u>Unit</u>
<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	70 ^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	80 ^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>		
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-246	Sum of alphas <15 pCi/L	pCi/L
Gross alpha	15	pCi/L
Iodine-129	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Nonvolatile beta	50 ^f	pCi/L
Plutonium-238	Sum of alphas <15 pCi/L	pCi/L
Plutonium-239/240	Sum of alphas <15 pCi/L	pCi/L

<u>Analyte</u>	<u>Concentration/Activity Limit</u>	<u>Unit</u>
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
Radium, total (radium-226 and -228)	5	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
Tritium	20,000	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 retained from SCDHEC (1992).
- ^b Concentration is practical quantitation limit (PQL) for EPA Method 335.2 (used by WA) and 335.3 (used by GE). This PQL is the contract-required PQL for WA and GE.
- ^c Concentration is PQL for EPA Method 8270 as defined in SCDHEC (1994). This PQL is the contract-required PQL for GE and WA.
- ^d Concentration is PQL for EPA Method 420.1 (used by GE) and 420.2 (used by WA). This PQL is the contract-required PQL for GE and WA.
- ^e Concentration is PQL for EPA Method 8240 as defined in SCDHEC (1994). This PQL is the contract-required PQL for GE and WA.
- ^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.

References Cited

SCDHEC (South Carolina Department of Health and Environmental Control), 1992 (modification effective date). **Hazardous Waste Permit SC1-890-008-989**. Office of Environmental Quality Control, Bureau of Solid and Hazardous Waste Management, Columbia, SC.

SCDHEC (South Carolina Department of Health and Environmental Control), 1994. **South Carolina Hazardous Waste Management Regulations**; R.61-79.124, .260 through .266, .268 and .270; December 1994. Columbia, SC.

SCDHEC (South Carolina Department of Health and Environmental Control), 1995. **1995 RCRA Renewal Permit**, Revision 0. Columbia, SC.

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Appendix B

Flagging Criteria

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Flagging Criteria

The Savannah River Site Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) flagging criteria are as follows:

- Flag 2 criteria for constituents equal the Safe Drinking Water Act (SDWA) final Primary Drinking Water Standards (PDWS), the SDWA proposed PDWS, or the SDWA Secondary Drinking Water Standards (SDWS). If a constituent does not have a drinking water standard, the Flag 2 criterion equals 10 times the method detection limit (MDL) calculated as the 90th percentile detection limit obtained recently by one of the primary analytical laboratories.
- Flag 1 criteria for constituents equal one-half of the final PDWS, one-half the proposed PDWS, or one-half the SDWS. If a constituent does not have a drinking water standard, the Flag 1 criterion equals 5 times the MDL calculated as the 90th percentile detection limit obtained recently by one of the primary analytical laboratories.
- Flag 0 criteria are assigned to constituent levels below Flag 1 criteria, constituent levels below the sample detection limits, or constituents having no flagging criteria.

The following parameters are exceptions to the flagging rules:

- EPD/EMS sets flagging criteria for pH and specific conductance. No flags are set for alkalinity, calcium, carbonate, magnesium, potassium, silica, sodium, total dissolved solids, total phosphates (as P), and total phosphorus. Analyses for these parameters are conducted as part of the biennial comprehensive analyses or by special request.
- Aesthetic parameters such as color, corrosivity, Eh, odor, surfactants, and turbidity are not assigned flagging criteria but are analyzed by special request.
- Common laboratory contaminants and cleaners such as dichloromethane (methylene chloride), ketones, phthalates, and toluene are not assigned flagging criteria unless they have PDWS. These constituents are analyzed by special request.

Analyte	Unit	Flag 1	Flag 2	Source ^a
Acenaphthene	µg/L	50	100	EPA Method 8270
Acenaphthylene	µg/L	50	100	EPA Method 8270
Acetone	µg/L	500	1,000	EPA Method 8240
Acetonitrile (Methyl cyanide)	µg/L	500	1,000	EPA Method 8240
Acetophenone	µg/L	50	100	EPA Method 8270
2-Acetylaminofluorene	µg/L	50	100	EPA Method 8270
Acrolein	µg/L	100	200	EPA Method 8240
Acrylonitrile	µg/L	100	200	EPA Method 8240
Actinium-228	pCi/L	1.64E+03	3.27E+03	Proposed PDWS (EPA, 1991)
Alachlor	µg/L	1	2	Final PDWS (EPA, 1993a)
Aldicarb ^b	µg/L	1.5	3	Final PDWS (EPA, 1993a)
Aldicarb sulfone ^b	µg/L	1	2	Final PDWS (EPA, 1993a)
Aldicarb sulfoxide ^b	µg/L	2	4	Final PDWS (EPA, 1993a)
Aldrin	µg/L	0.25	0.5	EPA Method 8080
Alkalinity (as CaCO ₃)		No flag	No flag	Set by EPD/EMS
Allyl chloride	µg/L	250	500	EPA Method 8240
Aluminum	µg/L	25	50	SDWS (EPA, 1993b)
Aluminum, dissolved	µg/L	25	50	SDWS (EPA, 1993b)
Aluminum, total recoverable	µg/L	25	50	SDWS (EPA, 1993b)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Americium-241	pCi/L	3.17E+00	6.34E+00	Proposed PDWS (EPA, 1991)
Americium-243	pCi/L	3.19E+00	6.37E+00	Proposed PDWS (EPA, 1991)
4-Aminobiphenyl	µg/L	50	100	EPA Method 8270
Ammonia	µg/L	500	1,000	APHA Method 417B
Ammonia nitrogen	µg/L	500	1,000	EPA Method 350.1
Aniline	µg/L	50	100	EPA Method 8270
Anthracene	µg/L	50	100	EPA Method 8270
Antimony	µg/L	3	6	Final PDWS (EPA, 1993a)
Antimony, dissolved	µg/L	3	6	Final PDWS (EPA, 1993a)
Antimony, total recoverable	µg/L	3	6	Final PDWS (EPA, 1993a)
Antimony-125	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Aramite	µg/L	50	100	EPA Method 8270
Arsenic	µg/L	25	50	Final PDWS (EPA, 1993a)
Arsenic, dissolved	µg/L	25	50	Final PDWS (EPA, 1993a)
Arsenic, total recoverable	µg/L	25	50	Final PDWS (EPA, 1993a)
Asbestos	Fibers/L	3,500,000	7,000,000	Final PDWS (EPA, 1993a)
Atrazine	µg/L	1.5	3	Final PDWS (EPA, 1993a)
Azobenzene	µg/L	50	100	EPA Method 625
Barium	µg/L	1,000	2,000	Final PDWS (EPA, 1993a)
Barium, dissolved	µg/L	1,000	2,000	Final PDWS (EPA, 1993a)
Barium, total recoverable	µg/L	1,000	2,000	Final PDWS (EPA, 1993a)
Barium-140 ^c	pCi/L	4.5E+01	9E+01	Interim Final PDWS (EPA, 1977)
Benzene	µg/L	2.5	5	Final PDWS (EPA, 1993a)
alpha-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
beta-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
delta-Benzene hexachloride	µg/L	0.25	0.5	EPA Method 8080
Benzidine	µg/L	250	500	EPA Method 8270
Benzo[a]anthracene	µg/L	0.05	0.1	Proposed PDWS (EPA, 1990)
Benzo[b]fluoranthene	µg/L	0.1	0.2	Proposed PDWS (EPA, 1990)
Benzo[k]fluoranthene	µg/L	0.1	0.2	Proposed PDWS (EPA, 1990)
Benzoic acid	µg/L	250	500	EPA Method 8270
Benzo[g,h,i]perylene	µg/L	50	100	EPA Method 8270
Benzo[a]pyrene	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)
1,4-Benzoquinone	µg/L	50	100	EPA Method 8270
Benzyl alcohol	µg/L	50	100	EPA Method 8270
Beryllium	µg/L	2	4	Final PDWS (EPA, 1993a)
Beryllium, dissolved	µg/L	2	4	Final PDWS (EPA, 1993a)
Beryllium, total recoverable	µg/L	2	4	Final PDWS (EPA, 1993a)
Beryllium-7	pCi/L	3E+03	6E+03	Interim Final PDWS (EPA, 1977)
Bis(2-chloroethoxy) methane	µg/L	50	100	EPA Method 8270
Bis(2-chloroethyl) ether	µg/L	50	100	EPA Method 8270
Bis(2-chloroisopropyl) ether	µg/L	50	100	EPA Method 8270
Bis(chloromethyl) ether	µg/L	50	100	EPA Method 8270
Bis(2-ethylhexyl) phthalate	µg/L	3	6	Final PDWS (EPA, 1993a)
Bismuth-214	pCi/L	9.4E+03	1.89E+04	Proposed PDWS (EPA, 1991)
Boron	µg/L	150	300	EPA Method 6010
Boron, dissolved	µg/L	150	300	EPA Method 6010
Boron, total recoverable	µg/L	150	300	EPA Method 6010
Bromide	µg/L	5,000	10,000	EPA Method 300.0
Bromodichloromethane	µg/L	50	100	Final PDWS (EPA, 1993a)
Bromoform	µg/L	50	100	Final PDWS (EPA, 1993a)
Bromomethane (Methyl bromide)	µg/L	5	10	EPA Method 8240
4-Bromophenyl phenyl ether	µg/L	50	100	EPA Method 8270
Butylbenzyl phthalate		No flag	No flag	Set by EPD/EMS
2-sec-Butyl-4,6-dinitrophenol	µg/L	3.5	7	Final PDWS (EPA, 1993a)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Cadmium	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Cadmium, dissolved	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Cadmium, total recoverable	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Calcium		No flag	No flag	Set by EPD/EMS
Calcium, dissolved		No flag	No flag	Set by EPD/EMS
Calcium, total recoverable		No flag	No flag	Set by EPD/EMS
Carbofuran	µg/L	20	40	Final PDWS (EPA, 1993a)
Carbon-14	pCi/L	1E+03	2E+03	Interim Final PDWS (EPA, 1977)
Carbonate		No flag	No flag	Set by EPD/EMS
Carbon disulfide	µg/L	5	10	EPA Method 8240
Carbon tetrachloride	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Cerium-141 ^c	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Cerium-144	pCi/L	1.31E+02	2.61E+02	Proposed PDWS (EPA, 1991)
Cesium-134 ^d	pCi/L	4.07E+01	8.13E+01	Proposed PDWS (EPA, 1991)
Cesium-137	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Chlordane	µg/L	1	2	Final PDWS (EPA, 1993a)
Chloride	µg/L	125,000	250,000	SDWS (EPA, 1993b)
4-Chloroaniline	µg/L	50	100	EPA Method 8270
Chlorobenzene	µg/L	50	100	Final PDWS (EPA, 1993a)
Chlorobenzilate	µg/L	50	100	EPA Method 8270
4-Chloro-m-cresol	µg/L	50	100	EPA Method 8270
Chloroethane	µg/L	5	10	EPA Method 8240
Chloroethene (Vinyl chloride)	µg/L	1	2	Final PDWS (EPA, 1993a)
Chloroethyl vinyl ether	µg/L	5	10	EPA Method 8240
2-Chloroethyl vinyl ether	µg/L	5	10	EPA Method 8240
Chloroform	µg/L	50	100	Final PDWS (EPA, 1993a)
Chloromethane (Methyl chloride)	µg/L	5	10	EPA Method 8240
2-Chloronaphthalene	µg/L	50	100	EPA Method 8240
2-Chlorophenol	µg/L	50	100	EPA Method 8270
4-Chlorophenyl phenyl ether	µg/L	50	100	EPA Method 8270
Chloroprene	µg/L	1,000	2,000	EPA Method 8240
Chromium	µg/L	50	100	Final PDWS (EPA, 1993a)
Chromium, dissolved	µg/L	50	100	Final PDWS (EPA, 1993a)
Chromium, total recoverable	µg/L	50	100	Final PDWS (EPA, 1993a)
Chromium-51 ^c	pCi/L	3E+03	6E+03	Interim Final PDWS (EPA, 1977)
Chrysene	µg/L	0.1	0.2	Proposed PDWS (EPA, 1990)
Cobalt	µg/L	20	40	EPA Method 6010
Cobalt, dissolved	µg/L	20	40	EPA Method 6010
Cobalt, total recoverable	µg/L	20	40	EPA Method 6010
Cobalt-57	pCi/L	5E+02	1E+03	Interim Final PDWS (EPA, 1977)
Cobalt-58	pCi/L	4.5E+03	9E+03	Interim Final PDWS (EPA, 1977)
Cobalt-60	pCi/L	5E+01	1E+02	Interim Final PDWS (EPA, 1977)
Color		No flag	No flag	Set by EPD/EMS
Copper	µg/L	500	1,000	Final PDWS (SCDHEC, 1981)
Copper, dissolved	µg/L	500	1,000	Final PDWS (SCDHEC, 1981)
Copper, total recoverable	µg/L	500	1,000	Final PDWS (SCDHEC, 1981)
Corrosivity		No flag	No flag	Set by EPD/EMS
m-Cresol (3-Methylphenol)	µg/L	50	100	EPA Method 8270
o-Cresol (2-Methylphenol)	µg/L	50	100	EPA Method 8270
p-Cresol (4-Methylphenol)	µg/L	50	100	EPA Method 8270
Curium-242	pCi/L	6.65E+01	1.33E+02	Proposed PDWS (EPA, 1991)
Curium-243	pCi/L	4.15E+00	8.3E+00	Proposed PDWS (EPA, 1991)
Curium-243/244 ^e	pCi/L	4.15E+00	8.3E+00	Proposed PDWS (EPA, 1991)
Curium-244	pCi/L	4.92E+00	9.84E+00	Proposed PDWS (EPA, 1991)
Curium-245/246 ^e	pCi/L	3.12E+00	6.23E+00	Proposed PDWS (EPA, 1991)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Curium-246	pCi/L	3.14E+00	6.27E+00	Proposed PDWS (EPA, 1991)
Cyanide	µg/L	100	200	Final PDWS (EPA, 1993a)
Dalapon ^b	µg/L	100	200	Final PDWS (EPA, 1993a)
p,p'-DDD	µg/L	0.5	1	EPA Method 8080
p,p'-DDE	µg/L	0.5	1	EPA Method 8080
p,p'-DDT	µg/L	0.5	1	EPA Method 8080
Diallate	µg/L	50	100	EPA Method 8270
Dibenz[a,h]anthracene	µg/L	0.15	0.3	Proposed PDWS (EPA, 1990)
Dibenzofuran	µg/L	50	100	EPA Method 8270
Dibromochloromethane	µg/L	50	100	Final PDWS (EPA, 1993a)
1,2-Dibromo-3-chloropropane	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)
1,2-Dibromoethane	µg/L	0.025	0.05	Final PDWS (EPA, 1993a)
Dibromomethane (Methylene bromide)	µg/L	5	10	EPA Method 8240
Di-n-butyl phthalate		No flag	No flag	Set by EPD/EMS
1,2-Dichlorobenzene	µg/L	300	600	Final PDWS (EPA, 1993a)
1,3-Dichlorobenzene	µg/L	50	100	EPA Method 8270
1,4-Dichlorobenzene	µg/L	37.5	75	Final PDWS (EPA, 1993a)
3,3'-Dichlorobenzidine	µg/L	50	100	EPA Method 8270
trans-1,4-Dichloro-2-butene	µg/L	150	300	EPA Method 8240
Dichlorodifluoromethane	µg/L	5	10	EPA Method 8240
1,1-Dichloroethane	µg/L	5	10	EPA Method 8240
1,2-Dichloroethane	µg/L	2.5	5	Final PDWS (EPA, 1993a)
1,1-Dichloroethylene	µg/L	3.5	7	Final PDWS (EPA, 1993a)
1,2-Dichloroethylene	µg/L	25	50	Final PDWS (EPA, 1993a)
cis-1,2-Dichloroethylene	µg/L	35	70	Final PDWS (EPA, 1993a)
trans-1,2-Dichloroethylene	µg/L	50	100	Final PDWS (EPA, 1993a)
Dichloromethane (Methylene chloride)	µg/L	2.5	5	Final PDWS (EPA, 1993a)
2,4-Dichlorophenol	µg/L	50	100	EPA Method 8270
2,6-Dichlorophenol	µg/L	50	100	EPA Method 8270
2,4-Dichlorophenoxyacetic acid	µg/L	35	70	Final PDWS (EPA, 1993a)
1,2-Dichloropropane	µg/L	2.5	5	Final PDWS (EPA, 1993a)
cis-1,3-Dichloropropene	µg/L	5	10	EPA Method 8240
trans-1,3-Dichloropropene	µg/L	5	10	EPA Method 8240
Dieldrin	µg/L	2.5	5	EPA Method 8080
Di(2-ethylhexyl) adipate	µg/L	200	400	Final PDWS (EPA, 1993a)
Diethyl phthalate		No flag	No flag	Set by EPD/EMS
Dimethoate	µg/L	50	100	EPA Method 8270
p-Dimethylaminoazobenzene	µg/L	50	100	EPA Method 8270
p-(Dimethylamino)ethylbenzene	µg/L	50	100	EPA Method 8270
7,12-Dimethylbenz[a]anthracene	µg/L	50	100	EPA Method 8270
3,3'-Dimethylbenzidine	µg/L	50	100	EPA Method 8270
a,a-Dimethylphenethylamine	µg/L	50	100	EPA Method 8270
2,4-Dimethyl phenol	µg/L	50	100	EPA Method 8270
Dimethyl phthalate		No flag	No flag	Set by EPD/EMS
1,3-Dinitrobenzene	µg/L	50	100	EPA Method 8270
2,4-Dinitrophenol	µg/L	250	500	EPA Method 8270
2,4-Dinitrotoluene	µg/L	50	100	EPA Method 8270
2,6-Dinitrotoluene	µg/L	50	100	EPA Method 8270
Di-n-octyl phthalate		No flag	No flag	Set by EPD/EMS
1,4-Dioxane	µg/L	50	100	EPA Method 8270
Diphenylamine	µg/L	50	100	EPA Method 8270
1,2-Diphenylhydrazine	µg/L	50	100	EPA Method 8270
Diquat dibromide ^b	µg/L	10	20	Final PDWS (EPA, 1993a)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Dissolved organic carbon	µg/L	5,000	10,000	EPA Method 9060
Disulfoton	µg/L	50	100	EPA Method 8270
Eh		No flag	No flag	Set by EPD/EMS
Endosulfan I	µg/L	0.5	1	EPA Method 8080
Endosulfan II	µg/L	0.5	1	EPA Method 8080
Endosulfan sulfate	µg/L	0.5	1	EPA Method 8080
Endothall ^b	µg/L	50	100	Final PDWS (EPA, 1993a)
Endrin	µg/L	1	2	Final PDWS (EPA, 1993a)
Endrin aldehyde	µg/L	0.5	1	EPA Method 8080
Endrin ketone		No flag	No flag	Set by EPD/EMS
Ethylbenzene	µg/L	350	700	Final PDWS (EPA, 1993a)
Ethyl methacrylate	µg/L	50	100	EPA Method 8270
Ethyl methanesulfonate	µg/L	50	100	EPA Method 8270
Europium-152	pCi/L	3E+01	6E+01	Interim Final PDWS (EPA, 1977)
Europium-154	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Europium-155	pCi/L	3E+02	6E+02	Interim Final PDWS (EPA, 1977)
Famphur	µg/L	50	100	EPA Method 8270
Fluoranthene	µg/L	50	100	EPA Method 8270
Fluorene	µg/L	50	100	EPA Method 8270
Fluoride	µg/L	2,000	4,000	Final PDWS (EPA, 1993a)
Glyphosate ^b	µg/L	350	700	Final PDWS (EPA, 1993a)
Gross alpha	pCi/L	7.5E+00	1.5E+01	Final PDWS (EPA, 1993a)
Heptachlor	µg/L	0.2	0.4	Final PDWS (EPA, 1993a)
Heptachlor epoxide	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)
Heptachlorodibenzo-p-dioxin isomers	µg/L	0.00325	0.0065	EPA Method 8280
1,2,3,4,6,7,8-HPCDD	µg/L	0.00325	0.0065	EPA Method 8280
Heptachlorodibenzo-p-furan isomers	µg/L	0.00225	0.0045	EPA Method 8280
1,2,3,4,6,7,8-HPCDF	µg/L	0.00225	0.0045	EPA Method 8280
Hexachlorobenzene	µg/L	0.5	1	Final PDWS (EPA, 1993a)
Hexachlorobutadiene	µg/L	50	100	EPA Method 8270
Hexachlorocyclopentadiene	µg/L	25	50	Final PDWS (EPA, 1993a)
Hexachlorodibenzo-p-dioxin isomers	µg/L	0.00225	0.0045	EPA Method 8280
1,2,3,4,7,8-HXCDD	µg/L	0.00225	0.0045	EPA Method 8280
Hexachlorodibenzo-p-furan isomers	µg/L	0.002	0.004	EPA Method 8280
1,2,3,4,7,8-HXCDF	µg/L	0.002	0.004	EPA Method 8280
Hexachloroethane	µg/L	50	100	EPA Method 8270
Hexachlorophene	µg/L	250	500	EPA Method 8270
Hexachloropropene	µg/L	50	100	EPA Method 8270
2-Hexanone	µg/L	50	100	EPA Method 8240
Indeno[1,2,3-c,d]pyrene	µg/L	50	100	EPA Method 8270
Iodine	µg/L	250	500	APHA Method 415A
Iodine-129	pCi/L	5E-01	1E+00	Interim Final PDWS (EPA, 1977)
Iodine-131 ^c	pCi/L	1.5E+00	3E+00	Interim Final PDWS (EPA, 1977)
Iodomethane (Methyl iodide)	µg/L	75	150	EPA Method 8240
Iron	µg/L	150	300	SDWS (EPA, 1993b)
Iron, dissolved	µg/L	150	300	SDWS (EPA, 1993b)
Iron, total recoverable	µg/L	150	300	SDWS (EPA, 1993b)
Iron-55 ^c	pCi/L	1E+03	2E+03	Interim Final PDWS (EPA, 1977)
Iron-59 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Isobutyl alcohol	µg/L	500	1,000	EPA Method 8240
Isodrin	µg/L	50	100	EPA Method 8270

Analyte	Unit	Flag 1	Flag 2	Source ^a
Isophorone	µg/L	50	100	EPA Method 8270
Isosafrole	µg/L	50	100	EPA Method 8270
Kepone	µg/L	50	100	EPA Method 8270
Lanthanum-140 ^c	pCi/L	3E+01	6E+01	Interim Final PDWS (EPA, 1977)
Lead	µg/L	25	50	Final PDWS (SCDHEC, 1981)
Lead, dissolved	µg/L	25	50	Final PDWS (SCDHEC, 1981)
Lead, total recoverable	µg/L	25	50	Final PDWS (SCDHEC, 1981)
Lead-212	pCi/L	6.2E+01	1.23E+02	Proposed PDWS (EPA, 1991)
Lindane	µg/L	0.1	0.2	Final PDWS (EPA, 1993a)
Lithium	µg/L	25	50	EPA Method 6010
Lithium, dissolved	µg/L	25	50	EPA Method 6010
Lithium, total recoverable	µg/L	25	50	EPA Method 6010
Magnesium		No flag	No flag	Set by EPD/EMS
Magnesium, dissolved		No flag	No flag	Set by EPD/EMS
Magnesium, total recoverable		No flag	No flag	Set by EPD/EMS
Manganese	µg/L	25	50	SDWS (EPA, 1993b)
Manganese, dissolved	µg/L	25	50	SDWS (EPA, 1993b)
Manganese, total recoverable	µg/L	25	50	SDWS (EPA, 1993b)
Manganese-54	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Mercury	µg/L	1	2	Final PDWS (EPA, 1993a)
Mercury, dissolved	µg/L	1	2	Final PDWS (EPA, 1993a)
Mercury, total recoverable	µg/L	1	2	Final PDWS (EPA, 1993a)
Methacrylonitrile	µg/L	250	500	EPA Method 8240
Methapyrilene	µg/L	50	100	EPA Method 8270
Methoxychlor	µg/L	20	40	Final PDWS (EPA, 1993a)
3-Methylcholanthrene	µg/L	50	100	EPA Method 8270
2-Methyl-4,6-dinitrophenol	µg/L	250	500	EPA Method 8270
Methyl ethyl ketone		No flag	No flag	Set by EPD/EMS
Methyl isobutyl ketone		No flag	No flag	Set by EPD/EMS
Methyl methacrylate	µg/L	50	100	EPA Method 8270
Methyl methanesulfonate	µg/L	50	100	EPA Method 8270
2-Methylnaphthalene	µg/L	50	100	EPA Method 8270
Molybdenum	µg/L	250	500	EPA Method 6010
Molybdenum, dissolved	µg/L	250	500	EPA Method 6010
Molybdenum, total recoverable	µg/L	250	500	EPA Method 6010
Naphthalene	µg/L	50	100	EPA Method 8270
1,4-Naphthoquinone	µg/L	50	100	EPA Method 8270
1-Naphthylamine	µg/L	50	100	EPA Method 8270
2-Naphthylamine	µg/L	50	100	EPA Method 8270
Neptunium-237	pCi/L	3.53E+00	7.06E+00	Proposed PDWS (EPA, 1991)
Nickel	µg/L	50	100	Final PDWS (EPA, 1993a)
Nickel, dissolved	µg/L	50	100	Final PDWS (EPA, 1993a)
Nickel, total recoverable	µg/L	50	100	Final PDWS (EPA, 1993a)
Nickel-59 ^c	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Nickel-63 ^c	pCi/L	2.5E+01	5E+01	Interim Final PDWS (EPA, 1977)
Niobium-95 ^c	pCi/L	1.5E+02	3.E+02	Interim Final PDWS (EPA, 1977)
Nitrate as nitrogen	µg/L	5,000	10,000	Final PDWS (EPA, 1993a)
Nitrate-nitrite as nitrogen	µg/L	5,000	10,000	Final PDWS (EPA, 1993a)
Nitrite as nitrogen	µg/L	500	1,000	Final PDWS (EPA, 1993a)
m-Nitroaniline	µg/L	50	100	EPA Method 8270
o-Nitroaniline	µg/L	50	100	EPA Method 8270
p-Nitroaniline	µg/L	50	100	EPA Method 8270
Nitrobenzene	µg/L	50	100	EPA Method 8270
Nitrogen by Kjeldahl method	µg/L	500	1,000	EPA Method 351.2
2-Nitrophenol	µg/L	50	100	EPA Method 8270

Analyte	Unit	Flag 1	Flag 2	Source ^a
4-Nitrophenol	µg/L	50	100	EPA Method 8270
4-Nitroquinoline-1-oxide	µg/L	50	100	EPA Method 8270
N-Nitrosodi-n-butylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodiethylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodimethylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodiphenylamine	µg/L	50	100	EPA Method 8270
N-Nitrosodipropylamine	µg/L	50	100	EPA Method 8270
N-Nitrosomethylethylamine	µg/L	50	100	EPA Method 8270
N-Nitrosomorpholine	µg/L	50	100	EPA Method 8270
N-Nitrosopiperidine	µg/L	50	100	EPA Method 8270
N-Nitrosopyrrolidine	µg/L	50	100	EPA Method 8270
5-Nitro-o-toluidine	µg/L	50	100	EPA Method 8270
Nonvolatile beta	pCi/L	2.5E+01	5E+01	Interim Final PDWS (EPA, 1977)
Octachlorodibenzo-p-dioxin isomers	µg/L	0.005	0.01	EPA Method 8280
Octachlorodibenzo-p-furan isomers	µg/L	0.005	0.01	EPA Method 8280
Odor		No flag	No flag	Set by EPD/EMS
Oil & Grease	µg/L	5,000	10,000	EPA Method 413.1
Oxamyl ^b	µg/L	100	200	Final PDWS (EPA, 1993a)
Parathion	µg/L	0.25	0.5	EPA Method 8080
Parathion methyl	µg/L	0.25	0.5	EPA Method 8080
PCB 1016	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1221	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1232	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1242	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1248	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1254	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1260	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
PCB 1262	µg/L	0.25	0.5	Final PDWS (EPA, 1993a)
Pentachlorobenzene	µg/L	50	100	EPA Method 8270
Pentachlorodibenzo-p-dioxin isomers	µg/L	0.00275	0.0055	EPA Method 8280
1,2,3,7,8-PCDD	µg/L	0.00275	0.0055	EPA Method 8280
Pentachlorodibenzo-p-furan isomers	µg/L	0.00275	0.0055	EPA Method 8280
1,2,3,7,8-PCDF	µg/L	0.00275	0.0055	EPA Method 8280
Pentachloroethane	µg/L	50	100	EPA Method 8270
Pentachloronitrobenzene	µg/L	50	100	EPA Method 8270
Pentachlorophenol	µg/L	0.5	1	Final PDWS (EPA, 1993a)
pH	pH	8	10	Set by EPD/EMS
pH	pH	4	3	Set by EPD/EMS
Phenacetin	µg/L	50	100	EPA Method 8270
Phenanthrene	µg/L	50	100	EPA Method 8270
Phenol	µg/L	50	100	EPA Method 8270
Phenols	µg/L	25	50	EPA Method 420.1
p-Phenylenediamine	µg/L	50	100	EPA Method 8270
Phorate	µg/L	0.5	1	EPA Method 8080
Picloram ^b	µg/L	250	500	Final PDWS (EPA, 1993a)
2-Picoline	µg/L	50	100	EPA Method 8270
Plutonium-238	pCi/L	3.51E+00	7.02E+00	Proposed PDWS (EPA, 1991)
Plutonium-239	pCi/L	3.11E+01	6.21E+01	Proposed PDWS (EPA, 1991)
Plutonium-239/240 ^e	pCi/L	3.11E+01	6.21E+01	Proposed PDWS (EPA, 1991)
Plutonium-240	pCi/L	3.11E+01	6.22E+01	Proposed PDWS (EPA, 1991)
Plutonium-241 ^c	pCi/L	3.13E+01	6.26E+01	Proposed PDWS (EPA, 1991)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Plutonium-242 ^c	pCi/L	3.27E+01	6.54E+01	Proposed PDWS (EPA, 1991)
Potassium		No flag	No flag	Set by EPD/EMS
Potassium, dissolved		No flag	No flag	Set by EPD/EMS
Potassium, total recoverable		No flag	No flag	Set by EPD/EMS
Potassium-40	pCi/L	1.5E+02	3E+02	Proposed PDWS (EPA, 1986)
Promethium-144	pCi/L	5E+01	1E+02	EPA Method 901.1
Promethium-146	pCi/L	5E+01	1E+02	EPA Method 901.1
Promethium-147	pCi/L	2.62E+03	5.24E+03	Proposed PDWS (EPA, 1991)
Pronamid	µg/L	50	100	EPA Method 8270
Propionitrile	µg/L	1,000	2,000	EPA Method 8240
Pyrene	µg/L	50	100	EPA Method 8270
Pyridine	µg/L	50	100	EPA Method 8270
Radium (alpha-emitting) ^f	pCi/L	1E+01	2E+01	Proposed PDWS (EPA, 1991)
Radium-226	pCi/L	1E+01	2E+01	Proposed PDWS (EPA, 1991)
Radium-228	pCi/L	1E+01	2E+01	Proposed PDWS (EPA, 1991)
Radon-222	pCi/L	1.5E+02	3E+02	Proposed PDWS (EPA, 1991)
Ruthenium-103 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Ruthenium-106	pCi/L	1.5E+01	3E+01	Interim Final PDWS (EPA, 1977)
Safrole	µg/L	50	100	EPA Method 8270
Selenium	µg/L	25	50	Final PDWS (EPA, 1993a)
Selenium, dissolved	µg/L	25	50	Final PDWS (EPA, 1993a)
Selenium, total recoverable	µg/L	25	50	Final PDWS (EPA, 1993a)
Silica		No flag	No flag	Set by EPD/EMS
Silica, dissolved		No flag	No flag	Set by EPD/EMS
Silica, total recoverable		No flag	No flag	Set by EPD/EMS
Silver	µg/L	50	100	SDWS (EPA, 1993b)
Silver, dissolved	µg/L	50	100	SDWS (EPA, 1993b)
Silver, total recoverable	µg/L	50	100	SDWS (EPA, 1993b)
Simazine ^b	µg/L	2	4	Final PDWS (EPA, 1993a)
Sodium		No flag	No flag	Set by EPD/EMS
Sodium, dissolved		No flag	No flag	Set by EPD/EMS
Sodium, total recoverable		No flag	No flag	Set by EPD/EMS
Sodium-22	pCi/L	2.33E+02	4.66E+02	Proposed PDWS (EPA, 1991)
Specific conductance	µS/cm	250	500	Set by EPD/EMS
Strontium-89	pCi/L	1E+01	2E+01	Interim Final PDWS (EPA, 1977)
Strontium-89/90 ^e	pCi/L	4E+00	8E+00	Final PDWS (EPA, 1993a)
Strontium-90	pCi/L	4E+00	8E+00	Final PDWS (EPA, 1993a)
Styrene	µg/L	50	100	Final PDWS (EPA, 1993a)
Sulfate	µg/L	200,000	400,000	Proposed PDWS (EPA, 1990)
Sulfide	µg/L	5,000	10,000	EPA Method 9030
Sulfotep	µg/L	50	100	EPA Method 8270
Surfactants		No flag	No flag	Set by EPD/EMS
2,3,7,8-TCDD	µg/L	0.000015	0.00003	Final PDWS (EPA, 1993a)
2,3,7,8-TCDF	µg/L	0.002	0.004	EPA Method 8280
Technetium-99	pCi/L	4.5E+02	9E+02	Interim Final PDWS (EPA, 1977)
1,2,4,5-Tetrachlorobenzene	µg/L	50	100	EPA Method 8270
Tetrachlorodibenzo-p-dioxin isomers	µg/L	0.00225	0.0045	EPA Method 8280
Tetrachlorodibenzo-p-furan isomers	µg/L	0.002	0.004	EPA Method 8280
1,1,1,2-Tetrachloroethane	µg/L	5	10	EPA Method 8240
1,1,2,2-Tetrachloroethane	µg/L	5	10	EPA Method 8240
Tetrachloroethylene	µg/L	2.5	5	Final PDWS (EPA, 1993a)
2,3,4,6-Tetrachlorophenol	µg/L	50	100	EPA Method 8270
Thallium	µg/L	1	2	Final PDWS (EPA, 1993a)

Analyte	Unit	Flag 1	Flag 2	Source ^a
Thallium, dissolved	µg/L	1	2	Final PDWS (EPA, 1993a)
Thallium, total recoverable	µg/L	1	2	Final PDWS (EPA, 1993a)
Thionazin	µg/L	50	100	EPA Method 8270
Thorium-228	pCi/L	6.25E+01	1.25E+02	Proposed PDWS (EPA, 1991)
Thorium-230	pCi/L	3.96E+01	7.92E+01	Proposed PDWS (EPA, 1991)
Thorium-232	pCi/L	4.4E+01	8.8E+01	Proposed PDWS (EPA, 1991)
Thorium-234	pCi/L	2E+02	4.01E+02	Proposed PDWS (EPA, 1991)
Tin	µg/L	10	20	EPA Method 282.2
Tin, dissolved	µg/L	10	20	EPA Method 282.2
Tin, total recoverable	µg/L	10	20	EPA Method 282.2
Tin-113 ^c	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Toluene	µg/L	500	1,000	Final PDWS (EPA, 1993a)
o-Toluidine	µg/L	50	100	EPA Method 8270
Total carbon	µg/L	5,000	10,000	EPA Method 9060
Total coliform		0	0	Final PDWS (EPA, 1993a)
Total dissolved solids		No flag	No flag	Set by EPD/EMS
Total hydrocarbons	µg/L	5,000	10,000	EPA Method 418.1
Total inorganic carbon	µg/L	5,000	10,000	EPA Method 9060
Total organic carbon	µg/L	5,000	10,000	EPA Method 9060
Total organic halogens	µg/L	25	50	EPA Method 9020
Total organic nitrogen	µg/L	500	1,000	APHA Method 420
Total petroleum hydrocarbons	µg/L	5,000	10,000	EPA Method 418.1
Total phosphates (as P)		No flag	No flag	Set by EPD/EMS
Total phosphorus		No flag	No flag	Set by EPD/EMS
Toxaphene	µg/L	1.5	3	Final PDWS (EPA, 1993a)
2,4,5-TP (Silvex)	µg/L	25	50	Final PDWS (EPA, 1993a)
Tributyl phosphate	µg/L	50	100	EPA Method 8270
1,2,4-Trichlorobenzene	µg/L	35	70	Final PDWS (EPA, 1993a)
1,1,1-Trichloroethane	µg/L	100	200	Final PDWS (EPA, 1993a)
1,1,2-Trichloroethane	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Trichloroethylene	µg/L	2.5	5	Final PDWS (EPA, 1993a)
Trichlorofluoromethane	µg/L	5	10	EPA Method 8240
2,4,5-Trichlorophenol	µg/L	50	100	EPA Method 8270
2,4,6-Trichlorophenol	µg/L	50	100	EPA Method 8270
2,4,5-Trichlorophenoxyacetic acid	µg/L	2.5	5	EPA Method 8150
1,2,3-Trichloropropane	µg/L	5	10	EPA Method 8240
O,O,O-Triethyl phosphorothioate	µg/L	50	100	EPA Method 8270
1,3,5-Trinitrobenzene	µg/L	50	100	EPA Method 8270
Tritium	pCi/mL	1E+01	2E+01	Final PDWS (EPA, 1993a)
Turbidity ^g		No flag	No flag	Set by EPD/EMS
Uranium	µg/L	10	20	Proposed PDWS (EPA, 1991)
Uranium, dissolved	µg/L	10	20	Proposed PDWS (EPA, 1991)
Uranium, total recoverable	µg/L	10	20	Proposed PDWS (EPA, 1991)
Uranium alpha activity	pCi/L	1.5E+01	3E+01	Proposed PDWS (EPA, 1991)
Uranium-233/234 ^e	pCi/L	6.9E+00	1.38E+01	Proposed PDWS (EPA, 1991)
Uranium-234	pCi/L	6.95E+00	1.39E+01	Proposed PDWS (EPA, 1991)
Uranium-235	pCi/L	7.25E+00	1.45E+01	Proposed PDWS (EPA, 1991)
Uranium-238	pCi/L	7.3E+00	1.46E+01	Proposed PDWS (EPA, 1991)
Vanadium	µg/L	40	80	EPA Method 6010
Vanadium, dissolved	µg/L	40	80	EPA Method 6010
Vanadium, total recoverable	µg/L	40	80	EPA Method 6010
Vinyl acetate	µg/L	5	10	EPA Method 8240

Analyte	Unit	Flag 1	Flag 2	Source ^a
Xylenes	µg/L	5,000	10,000	Final PDWS (EPA, 1993a)
Yttrium-88	pCi/L	5E+01	1E+02	EPA Method 901.1
Zinc	µg/L	2,500	5,000	SDWS (EPA, 1993b)
Zinc, dissolved	µg/L	2,500	5,000	SDWS (EPA, 1993b)
Zinc, total recoverable	µg/L	2,500	5,000	SDWS (EPA, 1993b)
Zinc-65	pCi/L	1.5E+02	3E+02	Interim Final PDWS (EPA, 1977)
Zirconium-95 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)
Zirconium/Niobium-95 ^c	pCi/L	1E+02	2E+02	Interim Final PDWS (EPA, 1977)

^a References for methods are in Appendix E; references for dated sources are at the end of this appendix.

^b EMS is currently unable to perform this analysis.

^c EMS discontinued monitoring this radionuclide because it is inappropriate for the SRS Groundwater Monitoring Program.

^d EPD/EMS set this flagging criterion using the 1991 proposed PDWS because the final PDWS in 1977 may have been in error.

^e For double radionuclide analyses where each separate radionuclide has its own standard, the more stringent standard is used.

^f The applied standard is for radium-226.

^g The primary maximum contaminant level range for turbidity is 1–5 NTU, which is inappropriate for the SRS Groundwater Monitoring Program.

References Cited

EPA (U.S. Environmental Protection Agency), 1977. **National Interim Primary Drinking Water Regulations**, EPA-570/9-76-003. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1986. *Water Pollution Control; National Primary Drinking Water Regulations, Radionuclides (Proposed)*. **Federal Register**, September 30, 1986, pp. 34835–34862. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1990. *National Primary and Secondary Drinking Water Regulations; Synthetic Organic Chemicals and Inorganic Chemicals (Proposed Rule)*. **Federal Register**, July 25, 1990, pp. 30369–30448. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1991. *National Primary Drinking Water Regulations; Radionuclides; Proposed Rule*. **Federal Register**, July 18, 1991, pp. 33052–33127. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1993a. *National Primary Drinking Water Regulations*. **Code of Federal Regulations**, Title 40, Part 141, pp. 592–732. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1993b. *National Secondary Drinking Water Regulations*. **Code of Federal Regulations**, Title 40, Part 143, pp. 774–777. Washington, DC.

SCDHEC (South Carolina Department of Health and Environmental Control), 1981. **State Primary Drinking Water Regulations**, R.61–58.5. Columbia, SC.

Appendix C

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

Geologic Age	Lithostratigraphic Units		Hydrostratigraphic Units					
Tertiary	"Upland Unit"		Regulatory Uppermost Aquifer	Aquifer Unit IIB	Aquifer Zone IIB ₂		Aquifer System II	
	Barnwell Group	Tobacco Rd Formation			Confining Zone IIB ₁ – IIB ₂			
		Dry Branch Formation			Aquifer Zone IIB ₁			
		Clinchfield Formation						
	Santee Limestone Formation				Confining Unit IIA–IIB			
	Warley Hill Formation			Aquifer Unit IIA				
	Congaree/ Fishburne Formations							
	Williamsburg Formation			Confining System I–II				
	Ellenton Formation							

Figure 3. Hydrostratigraphic Nomenclature

	SIPLE (1967)	SRS BASELINE HYDROGEOLOGIC STUDY		GEOTRANS (1988)	AUCOTT (1987)	DUPONT (1989)	AADLAND AND BLEDSOE (1990)									
T E R T I A R Y	HAWTHORNE AQUIFER	UPLAND UNIT		AQUIFER 4	TERTIARY SAND AQUIFER	ZONE 8		A Q U I F E R S Y S T E M I/ II	A Q U I F E R S Y S T E M I/ II	S Y S T E M S B O U N D A R Y	AQUIFER UNIT I/IIC	AQUIFER UNIT IIB	AQUIFER SYSTEM II			
	BARNWELL AQUIFER	B A R N W E L L G R O U P	TOBACCO RD FM			ZONE 7								7a		
			DRY BRANCH FM											7b		
	McBEAN AQUITARD GREEN CLAY	McBEAN FORMATION GREEN CLAY				ZONE 6								7c		
	CONGAREE AQUIFER	CONGAREE		AQUIFER 3		ZONE 5	5b									
	ELLENTON AQUITARD	WILLIAMSBURG FORMATION		AQUITARD 2	CONFINING UNIT	ZONE 4					5a					
ELLENTON FORMATION																
C R E T A C E O U S	UPPER TUSCALOOSA AQUIFER	PEEDEE FORMATION		AQUIFER 2	BLACK CREEK AQUIFER	ZONE 3	3b				A Q U I F E R S Y S T E M I/ II	A Q U I F E R S Y S T E M I/ II	S Y S T E M S B O U N D A R Y	CONFINING UNIT I/IIB-I/IIC	AQUIFER UNIT IB	AQUIFER SYSTEM I
	MID TUSCALOOSA AQUITARD	BLACK CREEK FORMATION				AQUITARD 1	CONFINING UNIT							ZONE 2		
	LOWER TUSCALOOSA AQUIFER	MIDDENDORF FORMATION		AQUIFER 1	MIDDENDORF AQUIFER	CONFINING UNIT I/IA-I/IIB	2c							AQUIFER UNIT I/IIA	AQUIFER UNIT IA	
	BASAL CLAY AQUITARD	CAPE FEAR FORMATION		BASE OF MODEL	CONFINING UNIT	2b	CONFINING SYSTEM 1							CONFINING SYSTEM I		
							2a							CONFINING SYSTEM 1		CONFINING SYSTEM I
TRIASSIC OR PALEOZOIC BASEMENT							PALEOZOIC-TRIASSIC BASEMENT HYDROLOGIC SYSTEM									

Figure 4. Regional Correlation of Hydrostratigraphic and Lithostratigraphic Nomenclatures

Figure 5. Location of Aquifer Zone IIB₂ (Water Table) Monitoring Wells at the F-Area HWMF

Figure 6. Location of Aquifer Zone IIB₁ (Barnwell/McBean) Monitoring Wells at the F-Area HWMF

Figure 7. Location of Aquifer Unit IIA (Congaree) Monitoring Wells at the F-Area HWMF

Figure 8. Cadmium Concentrations in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 9. Cadmium Concentrations in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 10. Cadmium Concentrations in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 11. Gross Alpha Activities in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 12. Gross Alpha Activities in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 13. Gross Alpha Activities in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 14. Lead Concentrations in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 15. Lead Concentrations in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 16. Lead Concentrations in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 17. Nitrate Concentrations in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 18. Nitrate Concentrations in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 19. Nitrate Concentrations in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 20. Nonvolatile Beta Activities in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 21. Nonvolatile Beta Activities in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 22. Nonvolatile Beta Activities in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 23. Strontium-90 Activities in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 24. Strontium-90 Activities in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 25. Strontium-90 Activities in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 26. Technetium-99 Activities in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 27. Technetium-99 Activities in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 28. Technetium-99 Activities in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 29. Tritium Activities in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 30. Tritium Activities in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 31. Tritium Activities in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 32. Uranium-233/234 Activities in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 33. Uranium-233/234 Activities in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 34. Uranium-233/234 Activities in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 35. Uranium-238 Activities in Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 36. Uranium-238 Activities in Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 37. Uranium-238 Activities in Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 38. Piezometric Surface Map of Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Third Quarter 1995

Figure 39. Piezometric Surface Map of Aquifer Zone IIB₂ (Water Table) at the F-Area HWMF, Fourth Quarter 1995

Figure 40. Potentiometric Surface Map of Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Third Quarter 1995

Figure 41. Potentiometric Surface Map of Aquifer Zone IIB₁ (Barnwell/McBean) at the F-Area HWMF, Fourth Quarter 1995

Figure 42. Potentiometric Surface Map of Aquifer Unit IIA (Congaree) at the F-Area HWMF, Third Quarter 1995

Figure 43. Potentiometric Surface Map of Aquifer Unit IIA (Congaree) at the F-Area HWMF, Fourth Quarter 1995

References

- Aadland, R. K., and H. W. Bledsoe, 1990. **Classification of Hydrostratigraphic Units at the Savannah River Site, South Carolina**, WSRC-RP-90-987. Westinghouse Savannah River Company, Savannah River Site, Aiken, SC.
- Aucott, W. R., M. E. Davis, and G. K. Speiran, 1987. **Geohydrologic Framework of the Coastal Plain Aquifers of South Carolina**, U.S. Geological Survey Water-Resources Investigations Report 85-4271.
- Du Pont (E. I. du Pont de Nemours & Company), 1989. **Final Safety Analysis Report of the Defense Waste Processing Facility**, DPSTSA-200-10. Savannah River Plant, Aiken, SC.
- GeoTrans, Inc., 1988. **A Numerical Model of the Hydrogeological System Underlying the Savannah River Plant**, Final report submitted to Savannah River Laboratory. GeoTrans, Inc., Sterling, VA.
- Siple, G. E., 1967. **Geology and Ground Water of the Savannah River Plant and Vicinity, South Carolina**. Geological Survey Water-Supply Paper 1841, Reston, VA.

Appendix D

Groundwater Monitoring Results Tables

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Key to Reading the Tables

The following abbreviations may appear in the data tables:

Constituents

1,2,3,4,6,7,8-HPCDD	1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-HPCDF	1,2,3,4,6,7,8-heptachlorodibenzo-p-furan
1,2,3,4,7,8-HXCDD	1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
1,2,3,4,7,8-HXCDF	1,2,3,4,7,8-hexachlorodibenzo-p-furan
Lindane	gamma-benzene hexachloride
PCB	polychlorinated biphenyl
1,2,3,7,8-PCDD	1,2,3,7,8-pentachlorodibenzo-p-dioxin
1,2,3,7,8-PCDF	1,2,3,7,8-pentachlorodibenzo-p-furan
Sp. conductance	specific conductance
TCDD	tetrachlorodibenzo-p-dioxin
TCDF	tetrachlorodibenzo-p-furan

Laboratories

CN	Clemson Technical Center, Inc.
EM	Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) Laboratory
GE and GP	General Engineering Laboratories, Inc.
SC	Savannah River Technology Center
SP	Spencer Testing Services, Inc.
TM	TMA/Eberline
WA and WS	Roy F. Weston, Inc.

Sampling Codes

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
W	purged water must be containerized; only water-level measurements were obtained
X	well went dry during purging; samples collected after well recovered

Sampling Methods

B	sample collected using an open-bucket bailer
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
MSL	million structures per liter
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
pCi/mL	picocuries per milliliter
pH	pH unit
μg/L	micrograms per liter
μS/cm	microsiemens per centimeter

Other

CS	carbon steel
DF	dilution factor column in data tables
E	exponential notation (e.g., $1.1\text{E}-09 = 1.1 \times 10^{-9} = 0.0000000011$)
H	holding time column in data tables
Mod	modifier column in data tables
PDWS	primary drinking water standard
PVC	polyvinyl chloride
ST	exceeded the final PDWS or screening level column in data tables
TOC	top of casing

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

Constituent results in analytical results tables that appear to equal the final PDWS but are not marked in the *ST* (exceeded the final PDWS or screening level) column are below the final PDWS 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*. The lettered modifiers are based on EPA's STORET codes.

Modifiers

(Blank)	Data are not qualified. Numbers should be interpreted exactly as reported.
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.
M	Presence of the analyte is verified but not quantified.
R	Result was rejected because performance requirements in the sample analysis or associated quality control analyses were not met.
T	Analyte was not detected; if present, it was below the criteria for detection.
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.

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.

Table D-1. Maximum Levels of Constituents Exceeding the Groundwater Protection Standard

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
Aquifer Zone IIB₂ (Water Table)						
FSB 76	Gross alpha	pCi/L	1.8E+01		—	
	Lead	µg/L	63	V	31	
	Nitrate-nitrite as nitrogen	µg/L	12,000		12,000	
	Radium, total alpha-emitting	pCi/L	8.8E+00	J	NA	
	Tritium	pCi/mL	3.2E+02		3.2E+02	
FSB 77	Cadmium	µg/L	NA		6.8	
	Gross alpha	pCi/L	NA		7.8E+02	
	Nitrate-nitrite as nitrogen	µg/L	NA		83,000	V
	Nonvolatile beta	pCi/L	NA		1.2E+03	
	Tritium	pCi/mL	NA		2.9E+03	
FSB 78	Cadmium	µg/L	25		31	
	Gross alpha	pCi/L	1.1E+03		4.9E+02	
	Nitrate-nitrite as nitrogen	µg/L	150,000		150,000	V
	Nonvolatile beta	pCi/L	2.8E+03		1.8E+03	
	Tritium	pCi/mL	7.5E+03		7.2E+03	
FSB 79	Cadmium	µg/L	6.8		6.7	
	Gross alpha	pCi/L	7.4E+02		7.5E+02	
	Nitrate-nitrite as nitrogen	µg/L	240,000		350,000	V
	Nonvolatile beta	pCi/L	1.0E+03		1.3E+03	
	Tritium	pCi/mL	1.4E+04		2.2E+04	
FSB 87D	Gross alpha	pCi/L	2.1E+01		3.9E+01	
	Tritium	pCi/mL	3.6E+01		2.6E+01	
FSB 88D	ALPHASUM	pCi/L	5.8E+02		NA	
	BETASUM	pCi/L	4.2E+02		NA	
	Gross alpha	pCi/L	4.4E+02	J	4.3E+02	J
	Mercury	µg/L	14	V	NA	
	Nitrate-nitrite as nitrogen	µg/L	53,000		53,000	V
	Nonvolatile beta	pCi/L	7.3E+02	J	5.7E+02	
	Radium, total alpha-emitting	pCi/L	1.0E+01		NA	
	Radium-228	pCi/L	5.8E+00		NA	
	Strontium-90	pCi/L	2.7E+02	V	NA	
	Tritium	pCi/mL	1.3E+03		1.0E+03	
FSB 89D	ALPHASUM	pCi/L	2.4E+02		NA	
	BETASUM	pCi/L	4.5E+02		NA	
	Gross alpha	pCi/L	3.0E+02	J	1.1E+02	
	Mercury	µg/L	3.6	V	NA	
	Nitrate-nitrite as nitrogen	µg/L	29,000		—	
	Nonvolatile beta	pCi/L	8.7E+02	J	2.9E+02	
	Radium, total alpha-emitting	pCi/L	7.7E+00		NA	
	Strontium-90	pCi/L	3.4E+02	V	NA	
	Tritium	pCi/mL	1.3E+03		7.8E+02	
FSB 90D	ALPHASUM	pCi/L	4.5E+02		NA	
	BETASUM	pCi/L	8.1E+02		NA	
	Cadmium	µg/L	7.1		7.3	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
	Gross alpha	pCi/L	5.2E+02		3.7E+02	
	Lead	µg/L	35	V	24	
	Mercury	µg/L	5.2	J	NA	
	Nitrate-nitrite as nitrogen	µg/L	47,000		67,000	V
	Nonvolatile beta	pCi/L	1.3E+03		1.1E+03	
	Radium, total alpha-emitting	pCi/L	1.9E+01	V	NA	
	Radium-226	pCi/L	1.7E+01		NA	
	Radium-228	pCi/L	2.2E+01		NA	
	Strontium-90	pCi/L	5.0E+02	V	NA	
	Tritium	pCi/mL	5.7E+03		4.3E+03	
FSB 91D	ALPHASUM	pCi/L	1.6E+02		NA	
	BETASUM	pCi/L	7.5E+01		NA	
	Gross alpha	pCi/L	1.5E+02	J	9.7E+01	
	Nitrate-nitrite as nitrogen	µg/L	15,000		15,000	
	Nonvolatile beta	pCi/L	1.4E+02	J	1.0E+02	
	Strontium-90	pCi/L	3.6E+01	V	NA	
	Tritium	pCi/mL	3.5E+02		3.3E+02	
FSB 92D	ALPHASUM	pCi/L	9.4E+02		NA	
	BETASUM	pCi/L	1.3E+03		NA	
	Cadmium	µg/L	19	V	23	
	Gross alpha	pCi/L	7.4E+02		8.3E+02	
	Lead	µg/L	29		15	
	Nitrate-nitrite as nitrogen	µg/L	170,000		200,000	V
	Nonvolatile beta	pCi/L	2.5E+03		2.0E+03	
	Radium, total alpha-emitting	pCi/L	1.4E+02		NA	
	Radium-226	pCi/L	2.3E+01		NA	
	Radium-228	pCi/L	4.7E+01		NA	
	Strontium-90	pCi/L	1.1E+03		NA	
	Tritium	pCi/mL	8.2E+03		7.9E+03	
FSB 93D	ALPHASUM	pCi/L	2.7E+02		NA	
	BETASUM	pCi/L	1.3E+03		NA	
	Cadmium	µg/L	13	V	14	
	Gross alpha	pCi/L	1.8E+02		1.9E+02	
	Nitrate-nitrite as nitrogen	µg/L	120,000		120,000	V
	Nonvolatile beta	pCi/L	1.8E+03		1.4E+03	
	Radium, total alpha-emitting	pCi/L	3.1E+01		NA	
	Radium-226	pCi/L	2.0E+01		NA	
	Radium-228	pCi/L	1.7E+01		NA	
	Strontium-90	pCi/L	1.1E+03		NA	
	Tritium	pCi/mL	7.9E+03		7.0E+03	
FSB 94DR	ALPHASUM	pCi/L	1.7E+03		NA	
	BETASUM	pCi/L	1.0E+03		NA	
	Gross alpha	pCi/L	9.5E+02		8.9E+02	
	Nitrate-nitrite as nitrogen	µg/L	150,000		120,000	V
	Nonvolatile beta	pCi/L	1.6E+03		1.3E+03	
	Radium, total alpha-emitting	pCi/L	5.8E+01		NA	
	Radium-226	pCi/L	1.2E+01		NA	
	Radium-228	pCi/L	4.8E+01		NA	
	Strontium-90	pCi/L	4.4E+02		NA	
	Thallium	µg/L	2.1	J	NA	
	Trichloroethylene	µg/L	10		NA	
	Tritium	pCi/mL	7.5E+03		6.6E+03	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB 95DR	ALPHASUM	pCi/L	1.4E+03		NA	
	BETASUM	pCi/L	1.4E+03		NA	
	Gross alpha	pCi/L	1.0E+03		9.1E+02	
	Nitrate-nitrite as nitrogen	µg/L	200,000		180,000	V
	Nonvolatile beta	pCi/L	1.2E+03		8.7E+02	
	Radium, total alpha-emitting	pCi/L	4.6E+01		NA	
	Radium-226	pCi/L	7.7E+00		NA	
	Radium-228	pCi/L	3.6E+01		NA	
	Strontium-90	pCi/L	2.0E+02		NA	
	Thallium	µg/L	2.5	J	NA	
	Tritium	pCi/mL	9.7E+03		9.0E+03	
FSB 97D	ALPHASUM	pCi/L	7.9E+02		NA	
	BETASUM	pCi/L	8.8E+02		NA	
	Cadmium	µg/L	11		8.2	
	Gross alpha	pCi/L	1.0E+03		1.0E+03	
	Lead	µg/L	42	V	34	
	Nitrate-nitrite as nitrogen	µg/L	100,000		140,000	V
	Nonvolatile beta	pCi/L	1.5E+03		1.3E+03	
	Radium, total alpha-emitting	pCi/L	2.9E+01	V	NA	
	Radium-226	pCi/L	1.6E+01		NA	
	Radium-228	pCi/L	2.5E+01		NA	
	Strontium-90	pCi/L	7.1E+02	V	NA	
	Tritium	pCi/mL	5.8E+03		5.4E+03	
FSB 98D	Cadmium	µg/L	NA		17	
	Gross alpha	pCi/L	NA		5.2E+02	
	Lead	µg/L	NA		44	
	Nitrate-nitrite as nitrogen	µg/L	NA		100,000	V
	Nonvolatile beta	pCi/L	NA		1.1E+03	
	Tritium	pCi/mL	NA		5.8E+03	
FSB 99D	ALPHASUM	pCi/L	1.9E+01		NA	
	Gross alpha	pCi/L	1.6E+01		--	
FSB105DR	ALPHASUM	pCi/L	9.0E+02		NA	
	BETASUM	pCi/L	1.0E+02		NA	
	Gross alpha	pCi/L	3.1E+02		2.7E+02	
	Nitrate-nitrite as nitrogen	µg/L	20,000		18,000	V
	Nonvolatile beta	pCi/L	4.2E+02		2.8E+02	
	Radium, total alpha-emitting	pCi/L	9.2E+00	JV	NA	
	Radium-226	pCi/L	9.7E+00		NA	
	Strontium-90	pCi/L	6.7E+01		NA	
FSB106D	Tritium	pCi/mL	3.2E+02		3.2E+02	
	Lead	µg/L	80	J	120	
FSB107D	ALPHASUM	pCi/L	1.0E+03		NA	
	BETASUM	pCi/L	7.5E+02		NA	
	Cadmium	µg/L	6.0	V	--	
	Gross alpha	pCi/L	9.0E+02		6.4E+02	J
	Mercury	µg/L	3.7	V	NA	
	Nitrate-nitrite as nitrogen	µg/L	51,000		46,000	V
	Nonvolatile beta	pCi/L	1.3E+03		7.4E+02	
	Radium, total alpha-emitting	pCi/L	1.5E+01	JV	NA	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
	Radium-226	pCi/L	1.4E+01		NA	
	Radium-228	pCi/L	5.7E+00		NA	
	Strontium-90	pCi/L	5.7E+02		NA	
	Tritium	pCi/mL	1.5E+03		1.7E+03	
FSB109D	Lead	µg/L	—		35	
	Tritium	pCi/mL	2.8E+01		2.3E+01	
FSB110D	ALPHASUM	pCi/L	1.5E+03		NA	
	BETASUM	pCi/L	1.8E+03		NA	
	Cadmium	µg/L	9.0		8.8	
	Gross alpha	pCi/L	9.0E+02		5.6E+02	
	Nitrate-nitrite as nitrogen	µg/L	170,000		270,000	V
	Nonvolatile beta	pCi/L	1.6E+03		9.8E+02	
	Radium, total alpha-emitting	pCi/L	1.4E+01	V	NA	
	Radium-226	pCi/L	9.2E+00		NA	
	Radium-228	pCi/L	3.5E+01		NA	
	Strontium-90	pCi/L	1.4E+03		NA	
	Tritium	pCi/mL	1.5E+04		1.4E+04	
FSB112D	ALPHASUM	pCi/L	2.7E+01		NA	
	BETASUM	pCi/L	7.1E+02		NA	
	Cadmium	µg/L	16		15	
	Cobalt	µg/L	76		NA	
	Gross alpha	pCi/L	1.4E+02		1.2E+02	
	Nitrate-nitrite as nitrogen	µg/L	77,000		110,000	V
	Nonvolatile beta	pCi/L	2.6E+03		2.2E+03	
	Radium, total alpha-emitting	pCi/L	1.1E+02	V	NA	
	Radium-226	pCi/L	8.1E+01		NA	
	Radium-228	pCi/L	3.8E+01		NA	
	Strontium-90	pCi/L	5.5E+02		NA	
	Tritium	pCi/mL	6.6E+03		5.8E+03	
FSB115D	Lead	µg/L	25		—	
FSB116D	Lead	µg/L	25	J	17	
FSB117D	Gross alpha	pCi/L	5.8E+02		5.0E+02	
	Nitrate-nitrite as nitrogen	µg/L	35,000		38,000	V
	Nonvolatile beta	pCi/L	6.1E+02	J	4.3E+02	
	Tritium	pCi/mL	8.6E+02		8.5E+02	
FSB119D	Cadmium	µg/L	6.2	V	7.1	
	Gross alpha	pCi/L	1.3E+03		6.5E+02	
	Lead	µg/L	—		40	
	Nitrate-nitrite as nitrogen	µg/L	100,000		80,000	V
	Nonvolatile beta	pCi/L	1.2E+03		6.1E+02	
	Tritium	pCi/mL	4.2E+03		4.7E+03	
FSB121DR	Gross alpha	pCi/L	3.5E+01		—	
	Lead	µg/L	66		—	
	Nonvolatile beta	pCi/L	7.9E+01	J	6.0E+01	
	Tritium	pCi/mL	6.8E+01		2.9E+01	
FSB122D	Nitrate-nitrite as nitrogen	µg/L	—		14,000	V
	Tritium	pCi/mL	4.2E+02		5.4E+02	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB123D	Tritium	pCi/mL	9.6E+01		—	
FSL 1D	Lead	µg/L	NA		27	
	Trichlorofluoromethane	µg/L	NA		7.1	
	Tritium	pCi/mL	NA		8.0E+01	
FSL 2D	Lead	µg/L	NA		76	
FSL 3D	Trichlorofluoromethane	µg/L	NA		9.8	
	Tritium	pCi/mL	NA		5.9E+01	
FSL 4D	Lead	µg/L	NA		75	
FSL 5D	Nitrate-nitrite as nitrogen	µg/L	NA		18,000	V
	Nonvolatile beta	pCi/L	NA		4.6E+02	
	Tritium	pCi/mL	NA		3.8E+02	
FSL 6D	Nitrate-nitrite as nitrogen	µg/L	NA		14,000	V
	Tritium	pCi/mL	NA		2.8E+02	
FSL 7D	Gross alpha	pCi/L	NA		4.4E+01	
	Nitrate-nitrite as nitrogen	µg/L	NA		73,000	V
	Nonvolatile beta	pCi/L	NA		2.0E+02	
	Radium, total alpha-emitting	pCi/L	NA		3.9E+01	
	Tritium	pCi/mL	NA		1.1E+03	
FSL 8D	Benzene	µg/L	NA		45	
	Lead	µg/L	NA		49	V
	Trichloroethylene	µg/L	NA		45	
	Tritium	pCi/mL	NA		2.7E+01	
FSL 9D	Gross alpha	pCi/L	NA		4.0E+01	
	Lead	µg/L	NA		22	
	Nitrate-nitrite as nitrogen	µg/L	NA		43,000	V
	Nonvolatile beta	pCi/L	NA		1.1E+02	
	Trichlorofluoromethane	µg/L	NA		7.1	J1
	Tritium	pCi/mL	NA		7.1E+02	

Aquifer Zone IIB₁ (Barnwell/McBean)

FSB 78C	Cadmium	µg/L	NA		16	
	Gross alpha	pCi/L	NA		1.3E+02	
	Nitrate-nitrite as nitrogen	µg/L	NA		250,000	V
	Nonvolatile beta	pCi/L	NA		1.4E+03	
	Tritium	pCi/mL	NA		8.5E+03	
FSB 79C	ALPHASUM	pCi/L	7.4E+02		NA	
	BETASUM	pCi/L	2.2E+03		NA	
	Cadmium	µg/L	28		26	
	Cobalt	µg/L	210		NA	
	Gross alpha	pCi/L	6.6E+02		4.4E+02	
	Nitrate-nitrite as nitrogen	µg/L	210,000		190,000	V
	Nonvolatile beta	pCi/L	3.0E+03		2.4E+03	
	Radium, total alpha-emitting	pCi/L	1.2E+02		NA	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
	Radium-226	pCi/L	1.9E+01		NA	
	Radium-228	pCi/L	2.1E+01		NA	
	Strontium-90	pCi/L	1.9E+03		NA	
	Tritium	pCi/mL	1.1E+04		1.1E+04	
FSB 87C	Nonvolatile beta	pCi/L	—		1.6E+02	
	Tritium	pCi/mL	4.7E+02		4.7E+02	
FSB 88C	Tritium	pCi/mL	—		5.0E+01	
FSB 89C	Phenols	µg/L	5.4	J	NA	
	Tritium	pCi/mL	2.0E+01		2.3E+01	
FSB 90C	Nitrate-nitrite as nitrogen	µg/L	13,000		13,000	
	Tritium	pCi/mL	6.7E+02		5.5E+02	
FSB 91C	BETASUM	pCi/L	3.2E+02		NA	
	Gross alpha	pCi/L	3.6E+01		3.5E+01	
	Nitrate-nitrite as nitrogen	µg/L	20,000		18,000	
	Nonvolatile beta	pCi/L	3.9E+02	J	3.7E+02	
	Radium, total alpha-emitting	pCi/L	1.7E+01		NA	
	Radium-226	pCi/L	1.5E+01		NA	
	Strontium-90	pCi/L	2.4E+02	V	NA	
	Thallium	µg/L	3.8	J	NA	
	Tritium	pCi/mL	5.6E+02		5.6E+02	
FSB 92C	BETASUM	pCi/L	2.6E+02		NA	
	Cadmium	µg/L	5.9		—	
	Gross alpha	pCi/L	3.7E+01		2.3E+01	
	Lead	µg/L	27	V	32	
	Nitrate-nitrite as nitrogen	µg/L	39,000		84,000	V
	Nonvolatile beta	pCi/L	3.5E+02	J	3.2E+02	
	Radium, total alpha-emitting	pCi/L	1.9E+01		NA	
	Radium-226	pCi/L	3.0E+01		NA	
	Strontium-90	pCi/L	1.7E+02	V	NA	
	Tritium	pCi/mL	1.5E+03		1.4E+03	
FSB 93C	BETASUM	pCi/L	6.6E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	42,000		46,000	
	Nonvolatile beta	pCi/L	5.1E+01	J	—	
	Strontium-90	pCi/L	1.4E+01	V	NA	
	Tritium	pCi/mL	1.8E+03	J	1.5E+03	
FSB 94C	Cadmium	µg/L	NA		26	
	Gross alpha	pCi/L	NA		8.8E+01	
	Nitrate-nitrite as nitrogen	µg/L	NA		280,000	V
	Nonvolatile beta	pCi/L	NA		2.3E+03	
	Tritium	pCi/mL	NA		1.0E+04	
FSB 95CR	ALPHASUM	pCi/L	8.0E+02		NA	
	BETASUM	pCi/L	1.7E+03		NA	
	Cadmium	µg/L	17	V	18	
	Cobalt	µg/L	500	V	NA	
	Gross alpha	pCi/L	7.8E+02		6.2E+02	
	Nickel	µg/L	100		NA	
	Nitrate-nitrite as nitrogen	µg/L	270,000		250,000	V

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB 97C	Nonvolatile beta	pCi/L	2.3E+03		2.1E+03	
	Radium, total alpha-emitting	pCi/L	1.5E+02		NA	
	Radium-226	pCi/L	1.1E+02		NA	
	Radium-228	pCi/L	2.1E+01		NA	
	Strontium-90	pCi/L	1.3E+03		NA	
	Tritium	pCi/mL	1.1E+04		1.1E+04	
	ALPHASUM	pCi/L	1.0E+03		NA	
	BETASUM	pCi/L	7.9E+02		NA	
	Cadmium	µg/L	7.1		5.3	
	Cobalt	µg/L	280		NA	
	Gross alpha	pCi/L	8.2E+02		5.0E+02	
	Lead	µg/L	17	V	—	
	Nitrate-nitrite as nitrogen	µg/L	150,000		140,000	V
	Nonvolatile beta	pCi/L	1.1E+03		6.5E+02	
	Radium, total alpha-emitting	pCi/L	8.0E+01	V	NA	
	Radium-226	pCi/L	7.1E+01		NA	
	Radium-228	pCi/L	3.9E+01		NA	
	Strontium-90	pCi/L	5.0E+02	V	NA	
	Trichloroethylene	µg/L	20		NA	
	Tritium	pCi/mL	1.1E+04		7.0E+03	
FSB 98C	ALPHASUM	pCi/L	9.9E+02		NA	
	BETASUM	pCi/L	4.8E+02		NA	
	Cadmium	µg/L	6.3	V	6.6	
	Cobalt	µg/L	320	V	NA	
	Gross alpha	pCi/L	8.8E+02		9.4E+02	
	Nitrate-nitrite as nitrogen	µg/L	140,000		120,000	V
	Nonvolatile beta	pCi/L	1.1E+03		8.1E+02	
	Radium, total alpha-emitting	pCi/L	7.4E+01		NA	
	Radium-226	pCi/L	5.4E+01		NA	
	Radium-228	pCi/L	1.1E+01		NA	
	Strontium-90	pCi/L	2.9E+02		NA	
	Thallium	µg/L	2.5	J	NA	
	Tritium	pCi/mL	6.7E+03		6.1E+03	
	ALPHASUM	pCi/L	1.8E+01		NA	
	BETASUM	pCi/L	5.2E+01		NA	
FSB 99C	Gross alpha	pCi/L	3.4E+01		—	
	Nitrate-nitrite as nitrogen	µg/L	28,000		28,000	V
	Nonvolatile beta	pCi/L	8.4E+01	J	1.1E+02	
	Radium, total alpha-emitting	pCi/L	6.0E+00		NA	
	Strontium-90	pCi/L	4.4E+01	V	NA	
	Trichloroethylene	µg/L	24		NA	
	Tritium	pCi/mL	1.2E+03	J	1.2E+03	
	Nitrate-nitrite as nitrogen	µg/L	31,000		49,000	
	Nonvolatile beta	pCi/L	2.7E+02	J	3.8E+02	
FSB102C	Tritium	pCi/mL	7.8E+02		7.8E+02	
	Nitrate-nitrite as nitrogen	µg/L	21,000		66,000	
	Tritium	pCi/mL	6.2E+02		6.2E+02	
FSB103C	Nitrate-nitrite as nitrogen	µg/L	21,000		66,000	
	Tritium	pCi/mL	6.2E+02		6.2E+02	
FSB104C	Nitrate-nitrite as nitrogen	µg/L	45,000		51,000	
	Tritium	pCi/mL	1.1E+03		1.3E+03	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB105C	ALPHASUM	pCi/L	5.1E+02		NA	
	BETASUM	pCi/L	6.8E+02		NA	
	Cadmium	µg/L	14		14	
	Cobalt	µg/L	310		NA	
	Gross alpha	pCi/L	5.2E+02		4.7E+02	
	Nitrate-nitrite as nitrogen	µg/L	300,000		180,000	V
	Nonvolatile beta	pCi/L	1.2E+03		1.1E+03	
	Radium, total alpha-emitting	pCi/L	7.1E+01	V	NA	
	Radium-226	pCi/L	6.0E+01		NA	
	Radium-228	pCi/L	2.4E+01		NA	
	Strontium-90	pCi/L	4.5E+02		NA	
	Tritium	pCi/mL	8.7E+03		8.9E+03	
FSB106C	Cadmium	µg/L	17		21	
	Gross alpha	pCi/L	6.2E+01		1.9E+01	J
	Nitrate-nitrite as nitrogen	µg/L	61,000		79,000	V
	Nonvolatile beta	pCi/L	7.8E+02	J	8.5E+02	
	Tritium	pCi/mL	1.6E+03		1.9E+03	
FSB107C	Strontium-90	pCi/L	2.3E+01	V	NA	
	Trichlorofluoromethane	µg/L	7.4		NA	
	Tritium	pCi/mL	1.3E+02		1.2E+02	
FSB110C	BETASUM	pCi/L	1.1E+02		NA	
	Nitrate-nitrite as nitrogen	µg/L	56,000		150,000	V
	Strontium-90	pCi/L	1.1E+01	V	NA	
	Tritium	pCi/mL	1.6E+03		1.3E+03	
FSB112C	BETASUM	pCi/L	1.8E+03		NA	
	Cadmium	µg/L	37		38	
	Cobalt	µg/L	320		NA	
	Gross alpha	pCi/L	2.3E+02		6.4E+01	
	Nickel	µg/L	110	V	NA	
	Nitrate-nitrite as nitrogen	µg/L	150,000		220,000	V
	Nonvolatile beta	pCi/L	2.1E+03		1.9E+03	
	Radium, total alpha-emitting	pCi/L	8.2E+01	V	NA	
	Radium-226	pCi/L	1.1E+02		NA	
	Radium-228	pCi/L	3.1E+01		NA	
	Strontium-90	pCi/L	1.3E+03		NA	
	Tritium	pCi/mL	7.4E+03		7.8E+03	
FSB113C	Tritium	pCi/mL	7.9E+01		7.2E+01	
FSB120C	BETASUM	pCi/L	7.1E+01		NA	
	Gross alpha	pCi/L	1.6E+01	J	—	
	Nitrate-nitrite as nitrogen	µg/L	36,000		35,000	V
	Radium, total alpha-emitting	pCi/L	7.7E+00		NA	
	Radium-226	pCi/L	5.9E+00		NA	
	Strontium-90	pCi/L	8.6E+00	V	NA	
	Tritium	pCi/mL	1.0E+03		9.9E+02	
FSB121C	Tritium	pCi/mL	1.4E+02		1.4E+02	
FSB122C	Nitrate-nitrite as nitrogen	µg/L	NA		60,000	V
	Nonvolatile beta	pCi/L	NA		5.8E+01	
	Tritium	pCi/mL	NA		1.6E+03	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
Aquifer Zone IIA (upper Congaree)						
FSB 78B	Nitrate-nitrite as nitrogen	µg/L	10,000		—	
	Tritium	pCi/mL	2.8E+02		2.2E+02	
FSB 79B	Tritium	pCi/mL	2.6E+01		2.5E+01	
FSB 87B	Nitrate-nitrite as nitrogen	µg/L	12,000		—	V
	Tritium	pCi/mL	1.0E+02		9.7E+01	
FSB 96AR	Tritium	pCi/mL	2.1E+01		—	
FSB 97A	Nitrate-nitrite as nitrogen	µg/L	13,000		—	V
	Tritium	pCi/mL	3.7E+02		2.7E+02	
FSB 98AR	Tritium	pCi/mL	3.1E+01		3.5E+01	
FSB 99A	Tritium	pCi/mL	1.8E+02		1.9E+02	
FSB100A	Tritium	pCi/mL	1.1E+02		1.2E+02	
FSB112A	Strontium-90	pCi/L	1.5E+01	V	NA	
	Tritium	pCi/mL	6.7E+01		8.5E+01	
FSB113A	Tritium	pCi/mL	1.6E+02		2.5E+02	
FSB120A	Nitrate-nitrite as nitrogen	µg/L	—		13,000	
	Tritium	pCi/mL	7.2E+01		4.3E+02	

NA= not analyzed.

— = analyzed but not above the GWPS.

Notes: This table presents the highest value for duplicate/replicate results. The groundwater samples are unfiltered; therefore, the results for the metals are for total recoverable metals.

Table D-2. Maximum Levels of Constituents Exceeding the SRS Flag 2 Criteria

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
Aquifer Zone IIB ₂ (Water Table)						
FSB 76	Gross alpha	pCi/L	1.8E+01	V	—	
	Lead	µg/L	63		—	
	Nitrate-nitrite as nitrogen	µg/L	12,000		12,000	
	Tritium	pCi/mL	3.2E+02		3.2E+02	
FSB 77	Cadmium	µg/L	NA		6.8	V
	Gross alpha	pCi/L	NA		7.8E+02	
	Nitrate-nitrite as nitrogen	µg/L	NA		83,000	
	Nonvolatile beta	pCi/L	NA		1.2E+03	
	Tritium	pCi/mL	NA		2.9E+03	
FSB 78	Cadmium	µg/L	25		31	V
	Gross alpha	pCi/L	1.1E+03		4.9E+02	
	Nitrate-nitrite as nitrogen	µg/L	150,000		150,000	
	Nonvolatile beta	pCi/L	2.8E+03		1.8E+03	
	Tritium	pCi/mL	7.5E+03		7.2E+03	
FSB 79	Cadmium	µg/L	6.8		6.7	V
	Gross alpha	pCi/L	7.4E+02		7.5E+02	
	Nitrate-nitrite as nitrogen	µg/L	240,000		350,000	
	Nonvolatile beta	pCi/L	1.0E+03		1.3E+03	
	Tritium	pCi/mL	1.4E+04		2.2E+04	
FSB 87D	Gross alpha	pCi/L	2.1E+01		3.9E+01	
	Tritium	pCi/mL	3.6E+01		2.6E+01	
FSB 88D	Americium-241	pCi/L	2.8E+01		NA	
	Curium-243/244	pCi/L	8.8E+01		NA	
	Gross alpha	pCi/L	4.4E+02		4.3E+02	
	Iodine-129	pCi/L	8.4E+01		NA	
	Mercury	µg/L	14		NA	
	Nitrate-nitrite as nitrogen	µg/L	53,000		53,000	
	Nonvolatile beta	pCi/L	7.3E+02		5.7E+02	
	Strontium-90	pCi/L	2.7E+02		NA	
	Tritium	pCi/mL	1.3E+03		1.0E+03	
	Uranium-233/234	pCi/L	2.0E+02		NA	
	Uranium-235	pCi/L	1.7E+01		NA	
	Uranium-238	pCi/L	2.5E+02		NA	
FSB 89D	Americium-241	pCi/L	9.6E+00		NA	V
	Gross alpha	pCi/L	3.0E+02		1.1E+02	
	Iodine-129	pCi/L	7.4E+01		NA	
	Mercury	µg/L	3.6		NA	
	Nitrate-nitrite as nitrogen	µg/L	29,000		—	
	Nonvolatile beta	pCi/L	8.7E+02		2.9E+02	
	Strontium-90	pCi/L	3.4E+02		NA	
	Tritium	pCi/mL	1.3E+03		7.8E+02	
	Uranium-233/234	pCi/L	9.9E+01		NA	
FSB 90D	Uranium-238	pCi/L	1.2E+02	V	NA	
	Cadmium	µg/L	7.1		7.3	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
	Gross alpha	pCi/L	5.2E+02		3.7E+02	
	Iodine-129	pCi/L	1.7E+02		NA	
	Mercury	µg/L	5.2	J	NA	
	Nitrate-nitrite as nitrogen	µg/L	47,000		67,000	V
	Nonvolatile beta	pCi/L	1.3E+03		1.1E+03	
	Radium-228	pCi/L	2.2E+01		NA	
	Strontium-90	pCi/L	5.0E+02	V	NA	
	Tritium	pCi/mL	5.7E+03		4.3E+03	
	Uranium-233/234	pCi/L	2.0E+02		NA	
	Uranium-235	pCi/L	1.8E+01		NA	
	Uranium-238	pCi/L	2.2E+02		NA	
FSB 91D	Gross alpha	pCi/L	1.5E+02	J	9.7E+01	
	Iodine-129	pCi/L	1.4E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	15,000		15,000	
	Nonvolatile beta	pCi/L	1.4E+02	J	1.0E+02	
	Strontium-90	pCi/L	3.6E+01	V	NA	
	Tritium	pCi/mL	3.5E+02		3.3E+02	
	Uranium-233/234	pCi/L	6.1E+01	V	NA	
	Uranium-238	pCi/L	8.8E+01	V	NA	
FSB 92D	Americium-241	pCi/L	2.1E+01		NA	
	Cadmium	µg/L	19	V	23	
	Curium-243/244	pCi/L	1.8E+01		NA	
	Gross alpha	pCi/L	7.4E+02		8.3E+02	
	Iodine-129	pCi/L	1.5E+02		NA	
	Nitrate-nitrite as nitrogen	µg/L	170,000		200,000	V
	Nonvolatile beta	pCi/L	2.5E+03		2.0E+03	
	Plutonium-238	pCi/L	8.3E+00		NA	
	Radium, total alpha-emitting	pCi/L	1.4E+02		NA	
	Radium-226	pCi/L	2.3E+01		NA	
	Radium-228	pCi/L	4.7E+01		NA	
	Strontium-90	pCi/L	1.1E+03		NA	
	Tritium	pCi/mL	8.2E+03		7.9E+03	
	Uranium-233/234	pCi/L	4.0E+02		NA	
	Uranium-235	pCi/L	3.2E+01		NA	
	Uranium-238	pCi/L	4.6E+02		NA	
FSB 93D	Cadmium	µg/L	13	V	14	
	Gross alpha	pCi/L	1.8E+02		1.9E+02	
	Iodine-129	pCi/L	1.3E+02		NA	
	Nitrate-nitrite as nitrogen	µg/L	120,000		120,000	V
	Nonvolatile beta	pCi/L	1.8E+03		1.4E+03	
	Radium, total alpha-emitting	pCi/L	3.1E+01		NA	
	Radium-226	pCi/L	2.0E+01		NA	
	Strontium-90	pCi/L	1.1E+03		NA	
	Tritium	pCi/mL	7.9E+03		7.0E+03	
	Uranium-233/234	pCi/L	1.1E+02		NA	
	Uranium-238	pCi/L	1.5E+02		NA	
FSB 94DR	Americium-241	pCi/L	6.7E+01		NA	
	Cesium-137	pCi/L	2.4E+02		NA	
	Curium-243/244	pCi/L	1.3E+02		NA	
	Gross alpha	pCi/L	9.5E+02		8.9E+02	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB 95DR	Iodine-129	pCi/L	1.8E+02		NA	
	Nitrate-nitrite as nitrogen	µg/L	150,000		120,000	V
	Nonvolatile beta	pCi/L	1.6E+03		1.3E+03	
	Radium, total alpha-emitting	pCi/L	5.8E+01		NA	
	Radium-228	pCi/L	4.8E+01		NA	
	Strontium-90	pCi/L	4.4E+02		NA	
	Thallium	µg/L	2.1	J	NA	
	Trichloroethylene	µg/L	10		NA	
	Tritium	pCi/mL	7.5E+03		6.6E+03	
	Uranium-233/234	pCi/L	4.8E+02		NA	
	Uranium-235	pCi/L	5.0E+01		NA	
	Uranium-238	pCi/L	9.3E+02		NA	
	Americium-241	pCi/L	5.1E+01		NA	
	Cesium-137	pCi/L	3.5E+02		NA	
	Curium-243/244	pCi/L	5.1E+01		NA	
	Gross alpha	pCi/L	1.0E+03		9.1E+02	
	Iodine-129	pCi/L	7.2E+02		NA	
	Nitrate-nitrite as nitrogen	µg/L	200,000		180,000	V
	Nonvolatile beta	pCi/L	1.2E+03		8.7E+02	
	Radium, total alpha-emitting	pCi/L	4.6E+01		NA	
FSB 97D	Radium-228	pCi/L	3.6E+01		NA	
	Strontium-90	pCi/L	2.0E+02		NA	
	Thallium	µg/L	2.5	J	NA	
	Tritium	pCi/mL	9.7E+03		9.0E+03	
	Uranium-233/234	pCi/L	3.6E+02		NA	
	Uranium-235	pCi/L	4.3E+01		NA	
	Uranium-238	pCi/L	9.2E+02		NA	
	Americium-241	pCi/L	2.9E+01		NA	
	Cadmium	µg/L	11		8.2	
	Cobalt	µg/L	41		NA	
	Curium-243/244	pCi/L	3.0E+01		NA	
	Gross alpha	pCi/L	1.0E+03		1.0E+03	
	Iodine-129	pCi/L	5.6E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	100,000		140,000	V
FSB 98D	Nonvolatile beta	pCi/L	1.5E+03		1.3E+03	
	Radium, total alpha-emitting	pCi/L	2.9E+01	V	NA	
	Radium-228	pCi/L	2.5E+01		NA	
	Strontium-90	pCi/L	7.1E+02	V	NA	
	Tritium	pCi/mL	5.8E+03		5.4E+03	
	Uranium-233/234	pCi/L	2.1E+02		NA	
	Uranium-235	pCi/L	2.2E+01		NA	
	Uranium-238	pCi/L	5.0E+02		NA	
	Cadmium	µg/L	NA		17	
	Gross alpha	pCi/L	NA		5.2E+02	
	Nitrate-nitrite as nitrogen	µg/L	NA		100,000	V
	Nonvolatile beta	pCi/L	NA		1.1E+03	
	Tritium	pCi/mL	NA		5.8E+03	
FSB 99D	Gross alpha	pCi/L	1.6E+01		—	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB105DR	Gross alpha	pCi/L	3.1E+02		2.7E+02	
	Iodine-129	pCi/L	2.5E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	20,000		18,000	V
	Nonvolatile beta	pCi/L	4.2E+02		2.8E+02	
	Strontium-90	pCi/L	6.7E+01		NA	
	Tritium	pCi/mL	3.2E+02		3.2E+02	
	Uranium-233/234	pCi/L	2.5E+02	V	NA	
	Uranium-235	pCi/L	2.2E+01		NA	
	Uranium-238	pCi/L	6.2E+02	V	NA	
FSB106D	Lead	µg/L	80	J	120	
FSB107D	Americium-241	pCi/L	3.9E+01		NA	
	Cadmium	µg/L	6.0	V	—	
	Curium-243/244	pCi/L	1.3E+01		NA	
	Gross alpha	pCi/L	9.0E+02		6.4E+02	J
	Iodine-129	pCi/L	1.3E+02		NA	
	Mercury	µg/L	3.7	V	NA	
	Nitrate-nitrite as nitrogen	µg/L	51,000		46,000	V
	Nonvolatile beta	pCi/L	1.3E+03		7.4E+02	
	Strontium-90	pCi/L	5.7E+02		NA	
	Tritium	pCi/mL	1.5E+03		1.7E+03	
	Uranium-233/234	pCi/L	4.3E+02		NA	
	Uranium-235	pCi/L	3.6E+01		NA	
	Uranium-238	pCi/L	5.1E+02		NA	
FSB109D	Tritium	pCi/mL	2.8E+01		2.3E+01	
FSB110D	Americium-241	pCi/L	5.7E+01		NA	
	Cadmium	µg/L	9.0		8.8	
	Curium-243/244	pCi/L	8.8E+01		NA	
	Gross alpha	pCi/L	9.0E+02		5.6E+02	
	Iodine-129	pCi/L	2.1E+02		NA	
	Nitrate-nitrite as nitrogen	µg/L	170,000		270,000	V
	Nonvolatile beta	pCi/L	1.6E+03		9.8E+02	
	Plutonium-238	pCi/L	1.0E+01		NA	
	Radium-228	pCi/L	3.5E+01		NA	
	Strontium-90	pCi/L	1.4E+03		NA	
	Tritium	pCi/mL	1.5E+04		1.4E+04	
	Uranium-233/234	pCi/L	2.7E+02		NA	
	Uranium-235	pCi/L	3.6E+01		NA	
	Uranium-238	pCi/L	1.1E+03		NA	
FSB112D	Cadmium	µg/L	16		15	
	Cobalt	µg/L	76		NA	
	Gross alpha	pCi/L	1.4E+02		1.2E+02	
	Iodine-129	pCi/L	6.5E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	77,000		110,000	V
	Nonvolatile beta	pCi/L	2.6E+03		2.2E+03	
	Radium, total alpha-emitting	pCi/L	1.1E+02	V	NA	
	Radium-226	pCi/L	8.1E+01		NA	
	Radium-228	pCi/L	3.8E+01		NA	
	Strontium-90	pCi/L	5.5E+02		NA	
	Tritium	pCi/mL	6.6E+03		5.8E+03	
	Uranium-233/234	pCi/L	1.5E+01		NA	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB117D	Gross alpha	pCi/L	5.8E+02		5.0E+02	
	Nitrate-nitrite as nitrogen	µg/L	35,000		38,000	V
	Nonvolatile beta	pCi/L	6.1E+02	J	4.3E+02	
	Tritium	pCi/mL	8.6E+02		8.5E+02	
FSB119D	Cadmium	µg/L	6.2	V	7.1	
	Gross alpha	pCi/L	1.3E+03		6.5E+02	
	Nitrate-nitrite as nitrogen	µg/L	100,000		80,000	V
	Nonvolatile beta	pCi/L	1.2E+03		6.1E+02	
	Tritium	pCi/mL	4.2E+03		4.7E+03	
FSB121DR	Gross alpha	pCi/L	3.5E+01		—	
	Lead	µg/L	66		—	
	Nonvolatile beta	pCi/L	7.9E+01	J	6.0E+01	
	Tritium	pCi/mL	6.8E+01		2.9E+01	
FSB122D	Nitrate-nitrite as nitrogen	µg/L	—		14,000	V
	Tritium	pCi/mL	4.2E+02		5.4E+02	
FSB123D	Tritium	pCi/mL	9.6E+01		—	
FSL 1D	Tritium	pCi/mL	NA		8.0E+01	
FSL 2D	Lead	µg/L	NA		76	
FSL 3D	Tritium	pCi/mL	NA		5.9E+01	
FSL 4D	Lead	µg/L	NA		75	
FSL 5D	Nitrate-nitrite as nitrogen	µg/L	NA		18,000	V
	Nonvolatile beta	pCi/L	NA		4.6E+02	
	Tritium	pCi/mL	NA		3.8E+02	
FSL 6D	Nitrate-nitrite as nitrogen	µg/L	NA		14,000	V
	Tritium	pCi/mL	NA		2.8E+02	
FSL 7D	Gross alpha	pCi/L	NA		4.4E+01	
	Nitrate-nitrite as nitrogen	µg/L	NA		73,000	V
	Nonvolatile beta	pCi/L	NA		2.0E+02	
	Radium, total alpha-emitting	pCi/L	NA		3.9E+01	
	Tritium	pCi/mL	NA		1.1E+03	
FSL 8D	Benzene	µg/L	NA		45	
	Trichloroethylene	µg/L	NA		45	
	Tritium	pCi/mL	NA		2.7E+01	
FSL 9D	Gross alpha	pCi/L	NA		4.0E+01	
	Nitrate-nitrite as nitrogen	µg/L	NA		43,000	V
	Nonvolatile beta	pCi/L	NA		1.1E+02	
	Tritium	pCi/mL	NA		7.1E+02	

Aquifer Zone IIB₁ (Barnwell/McBean)

FSB 78C	Cadmium	µg/L	NA		16	
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Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
	Gross alpha	pCi/L	NA		1.3E+02	
	Nitrate-nitrite as nitrogen	µg/L	NA		250,000	V
	Nonvolatile beta	pCi/L	NA		1.4E+03	
	Tritium	pCi/mL	NA		8.5E+03	
FSB 79C	Americium-241	pCi/L	3.3E+01		NA	
	Cadmium	µg/L	28		26	
	Cobalt	µg/L	210		NA	
	Curium-243/244	pCi/L	2.9E+01		NA	
	Gross alpha	pCi/L	6.6E+02		4.4E+02	
	Iodine-129	pCi/L	8.6E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	210,000		190,000	V
	Nonvolatile beta	pCi/L	3.0E+03		2.4E+03	
	Radium, total alpha-emitting	pCi/L	1.2E+02		NA	
	Radium-228	pCi/L	2.1E+01		NA	
	Strontium-90	pCi/L	1.9E+03		NA	
	Tritium	pCi/mL	1.1E+04		1.1E+04	
	Uranium-233/234	pCi/L	3.2E+02		NA	
	Uranium-235	pCi/L	2.3E+01		NA	
	Uranium-238	pCi/L	3.4E+02		NA	
FSB 87C	Nonvolatile beta	pCi/L	—		1.6E+02	
	Tritium	pCi/mL	4.7E+02		4.7E+02	
FSB 88C	Tritium	pCi/mL	—		5.0E+01	
FSB 89C	Iodine-129	pCi/L	2.7E+00	J	NA	
	Tritium	pCi/mL	—		2.3E+01	
FSB 90C	Nitrate-nitrite as nitrogen	µg/L	13,000		13,000	
	Tritium	pCi/mL	6.7E+02		5.5E+02	
FSB 91C	Gross alpha	pCi/L	3.6E+01		3.5E+01	
	Iodine-129	pCi/L	4.9E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	20,000		18,000	
	Nonvolatile beta	pCi/L	3.9E+02	J	3.7E+02	
	Strontium-90	pCi/L	2.4E+02	V	NA	
	Thallium	µg/L	3.8	J	NA	
	Tritium	pCi/mL	5.6E+02		5.6E+02	
FSB 92C	Cadmium	µg/L	5.9		—	
	Cobalt	µg/L	42		NA	
	Gross alpha	pCi/L	3.7E+01		2.3E+01	
	Iodine-129	pCi/L	2.2E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	39,000		84,000	V
	Nonvolatile beta	pCi/L	3.5E+02	J	3.2E+02	
	Radium-226	pCi/L	3.0E+01		NA	
	Strontium-90	pCi/L	1.7E+02	V	NA	
	Tritium	pCi/mL	1.5E+03		1.4E+03	
FSB 93C	Iodine-129	pCi/L	1.1E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	42,000		46,000	
	Nonvolatile beta	pCi/L	5.1E+01	J	—	
	Strontium-90	pCi/L	1.4E+01	V	NA	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB 94C	Tritium	pCi/mL	1.8E+03	J	1.5E+03	
	Cadmium	µg/L	NA		26	
	Gross alpha	pCi/L	NA		8.8E+01	
	Nitrate-nitrite as nitrogen	µg/L	NA		280,000	V
	Nonvolatile beta	pCi/L	NA		2.3E+03	
	Tritium	pCi/mL	NA		1.0E+04	
FSB 95CR	Americium-241	pCi/L	8.6E+00		NA	
	Cadmium	µg/L	17	V	18	
	Cobalt	µg/L	500	V	NA	
	Curium-243/244	pCi/L	1.7E+01		NA	
	Gross alpha	pCi/L	7.8E+02		6.2E+02	
	Iodine-129	pCi/L	8.7E+01		NA	
	Nickel	µg/L	100		NA	
	Nitrate-nitrite as nitrogen	µg/L	270,000		250,000	V
	Nonvolatile beta	pCi/L	2.3E+03		2.1E+03	
	Radium, total alpha-emitting	pCi/L	1.5E+02		NA	
	Radium-226	pCi/L	1.1E+02		NA	
	Radium-228	pCi/L	2.1E+01		NA	
	Strontium-90	pCi/L	1.3E+03		NA	
	Tritium	pCi/mL	1.1E+04		1.1E+04	
	Uranium-233/234	pCi/L	3.7E+02		NA	
	Uranium-235	pCi/L	3.2E+01		NA	
	Uranium-238	pCi/L	3.7E+02		NA	
FSB 97C	Americium-241	pCi/L	3.5E+01		NA	
	Cadmium	µg/L	7.1		5.3	
	Cobalt	µg/L	280		NA	
	Curium-243/244	pCi/L	2.8E+01		NA	
	Gross alpha	pCi/L	8.2E+02		5.0E+02	
	Iodine-129	pCi/L	9.8E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	150,000		140,000	V
	Nonvolatile beta	pCi/L	1.1E+03		6.5E+02	
	Radium, total alpha-emitting	pCi/L	8.0E+01	V	NA	
	Radium-226	pCi/L	7.1E+01		NA	
	Radium-228	pCi/L	3.9E+01		NA	
	Strontium-90	pCi/L	5.0E+02	V	NA	
	Trichloroethylene	µg/L	20		NA	
	Tritium	pCi/mL	1.1E+04		7.0E+03	
	Uranium-233/234	pCi/L	4.0E+02		NA	
	Uranium-235	pCi/L	3.1E+01		NA	
	Uranium-238	pCi/L	5.4E+02		NA	
FSB 98C	Americium-241	pCi/L	2.0E+01		NA	
	Cadmium	µg/L	6.3	V	6.6	
	Cobalt	µg/L	320	V	NA	
	Curium-243/244	pCi/L	1.5E+01		NA	
	Gross alpha	pCi/L	8.8E+02		9.4E+02	
	Iodine-129	pCi/L	8.8E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	140,000		120,000	V
	Nonvolatile beta	pCi/L	1.1E+03		8.1E+02	
	Plutonium-238	pCi/L	1.3E+01		NA	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
	Radium, total alpha-emitting	pCi/L	7.4E+01		NA	
	Radium-226	pCi/L	5.4E+01		NA	
	Strontium-90	pCi/L	2.9E+02		NA	
	Thallium	µg/L	2.5	J	NA	
	Tritium	pCi/mL	6.7E+03		6.1E+03	
	Uranium-233/234	pCi/L	3.8E+02		NA	
	Uranium-235	pCi/L	3.3E+01		NA	
	Uranium-238	pCi/L	5.3E+02		NA	
FSB 99C	Gross alpha	pCi/L	3.4E+01		—	
	Iodine-129	pCi/L	6.4E+00		NA	
	Nitrate-nitrite as nitrogen	µg/L	28,000		28,000	V
	Nonvolatile beta	pCi/L	8.4E+01	J	1.1E+02	
	Strontium-90	pCi/L	4.4E+01	V	NA	
	Trichloroethylene	µg/L	24		NA	
	Tritium	pCi/mL	1.2E+03	J	1.2E+03	
FSB102C	Nitrate-nitrite as nitrogen	µg/L	31,000		49,000	
	Nonvolatile beta	pCi/L	2.7E+02	J	3.8E+02	
	Tritium	pCi/mL	7.8E+02		7.8E+02	
FSB103C	Nitrate-nitrite as nitrogen	µg/L	21,000		66,000	
	Tritium	pCi/mL	6.2E+02		6.2E+02	
FSB104C	Nitrate-nitrite as nitrogen	µg/L	45,000		51,000	
	Tritium	pCi/mL	1.1E+03		1.3E+03	
FSB105C	Americium-241	pCi/L	2.1E+01		NA	
	Cadmium	µg/L	14		14	
	Cobalt	µg/L	310		NA	
	Curium-243/244	pCi/L	1.6E+01		NA	
	Gross alpha	pCi/L	5.2E+02		4.7E+02	
	Iodine-129	pCi/L	8.6E+01		NA	
	Nitrate-nitrite as nitrogen	µg/L	300,000		180,000	V
	Nonvolatile beta	pCi/L	1.2E+03		1.1E+03	
	Radium, total alpha-emitting	pCi/L	7.1E+01	V	NA	
	Radium-226	pCi/L	6.0E+01		NA	
	Radium-228	pCi/L	2.4E+01		NA	
	Strontium-90	pCi/L	4.5E+02		NA	
	Tritium	pCi/mL	8.7E+03		8.9E+03	
	Uranium-233/234	pCi/L	2.3E+02		NA	
	Uranium-235	pCi/L	1.6E+01		NA	
	Uranium-238	pCi/L	2.3E+02		NA	
FSB106C	Cadmium	µg/L	17		21	
	Gross alpha	pCi/L	6.2E+01		1.9E+01	J
	Nitrate-nitrite as nitrogen	µg/L	61,000		79,000	V
	Nonvolatile beta	pCi/L	7.8E+02	J	8.5E+02	
	Tritium	pCi/mL	1.6E+03		1.9E+03	
FSB107C	Strontium-90	pCi/L	2.3E+01	V	NA	
	Tritium	pCi/mL	1.3E+02		1.2E+02	
FSB110C	Iodine-129	pCi/L	1.3E+01		NA	

Well	Constituent	Unit	3Q95	Mod	4Q95	Mod
FSB112C	Nitrate-nitrite as nitrogen	µg/L	56,000		150,000	V
	Strontium-90	pCi/L	1.1E+01	V	NA	
	Tritium	pCi/mL	1.6E+03		1.3E+03	
	Cadmium	µg/L	37		38	
	Cobalt	µg/L	320		NA	
	Gross alpha	pCi/L	2.3E+02		6.4E+01	
	Iodine-129	pCi/L	1.9E+02		NA	
	Nickel	µg/L	110	V	NA	
	Nitrate-nitrite as nitrogen	µg/L	150,000		220,000	V
	Nonvolatile beta	pCi/L	2.1E+03		1.9E+03	
	Radium, total alpha-emitting	pCi/L	8.2E+01	V	NA	
	Radium-226	pCi/L	1.1E+02		NA	
	Radium-228	pCi/L	3.1E+01		NA	
	Strontium-90	pCi/L	1.3E+03		NA	
	Tritium	pCi/mL	7.4E+03		7.8E+03	
FSB113C	Tritium	pCi/mL	7.9E+01		7.2E+01	
FSB120C	Gross alpha	pCi/L	1.6E+01	J	—	
	Iodine-129	pCi/L	9.4E+00		NA	
	Nitrate-nitrite as nitrogen	µg/L	36,000		35,000	V
	Strontium-90	pCi/L	8.6E+00	V	NA	
	Tritium	pCi/mL	1.0E+03		9.9E+02	
FSB121C	Tritium	pCi/mL	1.4E+02		1.4E+02	
FSB122C	Nitrate-nitrite as nitrogen	µg/L	NA		60,000	V
	Nonvolatile beta	pCi/L	NA		5.8E+01	
	Tritium	pCi/mL	NA		1.6E+03	
Aquifer Zone IIA (upper Congaree)						
FSB 78B	Nitrate-nitrite as nitrogen	µg/L	10,000		—	
	Tritium	pCi/mL	2.8E+02		2.2E+02	
FSB 79B	Tritium	pCi/mL	2.6E+01		2.5E+01	
FSB 87B	Nitrate-nitrite as nitrogen	µg/L	12,000		—	V
	Tritium	pCi/mL	1.0E+02		9.7E+01	
FSB 96AR	Tritium	pCi/mL	2.1E+01		—	
FSB 97A	Nitrate-nitrite as nitrogen	µg/L	13,000		—	V
	Tritium	pCi/mL	3.7E+02		2.7E+02	
FSB 98AR	Tritium	pCi/mL	3.1E+01		3.5E+01	
FSB 99A	Tritium	pCi/mL	1.8E+02		1.9E+02	
FSB100A	Tritium	pCi/mL	1.1E+02		1.2E+02	
FSB112A	Strontium-90	pCi/L	1.5E+01	V	NA	
	Tritium	pCi/mL	6.7E+01		8.5E+01	

<i>Well</i>	<i>Constituent</i>	<i>Unit</i>	<i>3Q95</i>	<i>Mod</i>	<i>4Q95</i>	<i>Mod</i>
FSB113A	Tritium	pCi/mL	1.6E+02		2.5E+02	
FSB120A	Nitrate-nitrite as nitrogen	µg/L	–		13,000	
	Tritium	pCi/mL	7.2E+01		4.3E+02	

NA = not analyzed.

– = analyzed but not above the Flag 2 criterion.

Notes: This table presents the highest value for duplicate/replicate results. The groundwater samples are unfiltered. Therefore, the results for the metals are for total recoverable metals. Flags are established by EPD/EMS and are based on final PDWS, Secondary Drinking Water Standards, or method detection limits (see Appendix B).

Table D-3. 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 (IIB ₂)

SAMPLE DATE 07/12/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	218.5	218.5	ft msl
pH	4.7	4.5	pH
Sp. conductance	115	126	µS/cm
Water temperature	21.8	20.6	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	4	NTU
Volume purged	8.7	2.6	well volumes
Sampling code			
Synchronous water level	218.6 (08/09/95)	218.5 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	23	1	J			0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	400	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	63	1	V	■		2	GE	31	1		■		1	GE	µg/L
Mercury, total recoverable	<0.11	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	12,000	20		■		2	GE	12,000	10		■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	7.9	1	J			0	GE								µg/L
Zinc, total recoverable	100	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 76 (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	-3.6E-04	1	UI			0	GP								pCi/L
Cesium-137	3.6E+00	1				0	GP								pCi/L
Cobalt-60	9.3E-01	1	UI			0	GP								pCi/L
Curium-242	9.5E-03	1	UI			0	GP								pCi/L
Curium-243/244	-3.7E-02	1	UI			0	GP								pCi/L
Curium-245/246	-4.6E-03	1	UI			0	GP								pCi/L
Gross alpha	1.8E+01	1		■		2	GP	4.8E+00	1				0	GP	pCi/L
Iodine-129	2.6E-01	1	UJI			0	GP								pCi/L
Nonvolatile beta	1.5E+01	1				0	GP	8.2E+00	1				0	GP	pCi/L
Plutonium-238	1.0E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-1.3E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	8.8E+00	1	J	■		0	GP								pCi/L
Radium-226	4.4E+00	1				0	GP								pCi/L
Radium-228	-3.2E-01	1	UI			0	GP								pCi/L
Strontium-90	2.3E-01	1	UIV			0	GP								pCi/L
Technetium-99	2.4E+01	1				0	GP								pCi/L
Thorium-228	-8.0E-03	1	UI			0	GP								pCi/L
Thorium-230	6.5E-02	1	UI			0	GP								pCi/L
Thorium-232	7.0E-03	1	UI			0	GP								pCi/L
Tritium	3.2E+02	1		■		2	GP	3.2E+02	1		■		2	GP	pCi/L
Uranium-233/234	2.4E-01	1				0	GP								pCi/L
Uranium-235	0.0E+00	1	UI			0	GP								pCi/L
Uranium-238	1.4E-01	1	UI			0	GP								pCi/L
Total alpha emitters	2.4E-01														pCi/L
Total beta emitters	2.7E+01														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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	07/12/95	10/03/95
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FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	155.7	155.7	ft msl
pH	6.8	6.2	pH
Sp. conductance	97	116	μS/cm
Water temperature	20.6	19.7	°C
Alkalinity as CaCO ₃	34	12	mg/L
Turbidity	1	0	NTU
Volume purged	2.7	1.6	well volumes
Sampling code			
Synchronous water level	155.6 (08/09/95)	155.9 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<4.7	1				0	WA	<2.0	1				0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<3.7	1	JV			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	9.0	1	J			0	WA	1,200	1				0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 76A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				0	GP	6.4E-01	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.3E+00	1				0	GP	1.2E+00	1	UI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.0E-02	1	UI			0	TM	-1.0E-01	1	UI			0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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	07/12/95	10/03/95
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FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	152.0	152.1	ft msl
pH	6.6	6.5	pH
Sp. conductance	111	130	μS/cm
Water temperature	20.7	19.5	°C
Alkalinity as CaCO ₃	35	28	mg/L
Turbidity	1	1	NTU
Volume purged	3.5	3.3	well volumes
Sampling code			
Synchronous water level	151.9 (08/09/95)	152.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1	JV			0	GE	<3.8	1	JV			0	WA	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	500	1				0	GE	580	1				0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 76B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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-01	1	UI			0	GP	8.0E-01	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.0E+00	1	UI			0	GP	0.0E+00	1	UI			0	TM	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	7.9E-02	1	UI			0	GP	8.2E-01	1	J1			0	TM	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 76C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N76112.4 E51396.4	33.277970 °N 81.679309 °W	165.3-154.8 ft msl	293.6 ft msl	4" PVC	S	Barnwell (IIB ₁)

SAMPLE DATE 07/12/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	213.6	213.3	ft msl
pH	5.9	5.7	pH
Sp. conductance	42	48	μS/cm
Water temperature	20.5	19.6	°C
Alkalinity as CaCO ₃	13	8	mg/L
Turbidity	1	0	NTU
Volume purged	3.3	2.7	well volumes
Sampling code			
Synchronous water level	213.4 (08/09/95)	213.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable								6.9	1	V			0	GE	μg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.36	1	J			0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<1.4	1	JV			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable								<10	1				0	GE	μg/L
Nitrate-nitrite as nitrogen	1,100	1				0	GE	1,300	1				0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable								<2.0	1				0	GE	μg/L
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 76C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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	UI			0	GP	1.7E-02	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	5.6E-01	1	UI			0	GP	1.2E-01	1	UI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	2.8E+00	1				0	GP	2.9E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/04/95 10/17/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	213.4	213.0	ft msl
pH		3.6	pH
Sp. conductance		717	µS/cm
Water temperature		22.3	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		1	NTU
Volume purged	2.4	2.2	well volumes
Sampling code	P		
Synchronous water level	213.8 (08/09/95)	213.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								6.8	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								9.3	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen								83,000	50	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 77 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								7.8E+02	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta								1.2E+03	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								2.9E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/04/95 10/16/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	209.5	209.1	ft msl
pH	3.1	3.3	pH
Sp. conductance	1120	1316	µS/cm
Water temperature	23.0	21.9	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volume purged	2.8	2.3	well volumes
Sampling code			
Synchronous water level	209.5 (08/10/95)	209.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	25	1		■		2	GE	31	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1				0	GE	6.6	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	150,000	200		■		2	GE	150,000	100	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 78 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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		■		2	GP	4.9E+02	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.8E+03	1		■		2	GP	1.8E+03	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	7.5E+03	1		■		2	GP	7.2E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 07/14/95 10/03/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	156.5	156.7	ft msl
pH	6.7	6.3	pH
Sp. conductance	104	110	µS/cm
Water temperature	20.4	19.9	°C
Alkalinity as CaCO ₃	37	31	mg/L
Turbidity	1	0	NTU
Volume purged	2.6	2.3	well volumes
Sampling code			
Synchronous water level	156.6 (08/10/95)	156.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable	20	1	J			0	GE								µg/L
Cadmium, total recoverable	<4.7	1				0	WA	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	200	1	V			0	WA	370	1				0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 78A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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-01	1	UIV			0	TM	3.9E-01	1	UJI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	3.6E+00	1				0	TM	2.0E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.3E+01	1				1	TM	1.3E+01	1				1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 78B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 07/14/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	154.9	155.0	ft msl
pH	7.0	6.6	pH
Sp. conductance	235	244	µS/cm
Water temperature	20.4	20.2	°C
Alkalinity as CaCO ₃	68	55	mg/L
Turbidity	0	0	NTU
Volume purged	3.5	2.7	well volumes
Sampling code			
Synchronous water level	155.0 (08/10/95)	155.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	45	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.053	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	10,000	10		■		2	GE	9,800	10				1	GE	µg/L
Selenium, total recoverable	<1.4	1	JV			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<5.6	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.6	1				0	GE								µg/L
Dichloromethane	<2.3	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 78B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	5.2E-02	1	UI			0	GP								pCi/L
Cesium-137	-1.3E+00	1	UI			0	GP								pCi/L
Cobalt-60	1.0E+00	1	UI			0	GP								pCi/L
Curium-242	3.1E-01	1	UIV			0	GP								pCi/L
Curium-243/244	4.8E-03	1	UI			0	GP								pCi/L
Curium-245/246	5.1E-01	1	UIV			0	GP								pCi/L
Gross alpha	1.4E+00	1	UI			0	GP	9.7E-01	1				0	GP	pCi/L
Iodine-129	1.2E+00	1	UI			0	GP								pCi/L
Nonvolatile beta	1.9E+00	1				0	GP	4.3E+00	1				0	GP	pCi/L
Plutonium-238	-4.5E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	3.3E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.0E-01	1	UJI			0	GP								pCi/L
Radium-226	3.7E-01	1				0	GP								pCi/L
Radium-228	-6.6E-01	1	UI			0	GP								pCi/L
Strontium-90	7.8E-01	1	UIV			0	GP								pCi/L
Technetium-99	8.1E-01	1	UI			0	GP								pCi/L
Thorium-228	6.4E-04	1	UI			0	GP								pCi/L
Thorium-230	6.2E-02	1	UI			0	GP								pCi/L
Thorium-232	-9.9E-03	1	UI			0	GP								pCi/L
Tritium	2.8E+02	1		■		2	GP	2.2E+02	1		■		2	GP	pCi/mL
Uranium-233/234	1.2E-01	1				0	GP								pCi/L
Uranium-235	6.9E-03	1	UI			0	GP								pCi/L
Uranium-238	4.1E-02	1				0	GP								pCi/L
Total alpha emitters	1.6E-01														pCi/L
Total beta emitters															pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 78C

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

SAMPLE DATE	08/18/95	10/17/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	208.6	208.5	ft msl
pH		4.1	pH
Sp. conductance		1814	µS/cm
Water temperature		17.9	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		1	NTU
Volume purged		1.1	well volumes
Sampling code	P	X	
Synchronous water level	208.5 (08/10/95)	208.3 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								16	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								7.1	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen								250,000	200	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 78C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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+02	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta								1.4E+03	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								8.5E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/04/95 10/18/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	202.3	202.0	ft msl
pH	3.2	3.3	pH
Sp. conductance	1400	2380	µS/cm
Water temperature	20.7	21.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	3.0	2.3	well volumes
Sampling code			
Synchronous water level	202.2 (08/09/95)	202.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	6.8	1		■		2	GE	6.7	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	240,000	800		■		2	GE	350,000	200	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 79 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	7.4E+02	1		■		2	GP	7.5E+02	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.0E+03	1		■		2	GP	1.3E+03	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.4E+04	1		■		2	GP	2.2E+04	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 79A

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

SAMPLE DATE 07/12/95 10/01/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	158.5	158.5	ft msl
pH	6.1	6.3	pH
Sp. conductance	71	84	μS/cm
Water temperature	19.8	19.5	°C
Alkalinity as CaCO ₃	27	27	mg/L
Turbidity	1	0	NTU
Volume purged	3.5	2.8	well volumes
Sampling code			
Synchronous water level	158.6 (08/09/95)	158.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<2.7	1	JV			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	240	1				0	GE	270	1	V			0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 79A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	6.8E-01	1				0	GP	5.7E-01	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.5E+00	1				0	GP	4.0E-01	1	UIV			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	8.2E+00	1				0	GP	9.1E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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 07/12/95 10/01/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	158.8	158.9	ft msl
pH	6.7	6.4	pH
Sp. conductance	127	168	µS/cm
Water temperature	20.0	19.1	°C
Alkalinity as CaCO ₃	52	68	mg/L
Turbidity	1	0	NTU
Volume purged	3.4	3.0	well volumes
Sampling code			
Synchronous water level	158.6 (08/09/95)	158.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable								30	1				0	GE	µg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.31	1	J			0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<6.1	1	JV			0	GE	<1.5	1	JV			0	WA	µg/L
Mercury, total recoverable															
Nickel, total recoverable								<10	1				0	GE	µg/L
Nitrate-nitrite as nitrogen	1,600	1				0	GE	1,600	1	V			0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable								<2.0	1				0	GE	µg/L
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 79B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	4.5E-01	1	UI			0	GP	3.0E-01	1	UI			0	TM	pCi/L
Iodine-129															
Nonvolatile beta	1.7E+00	1				0	GP	2.1E+00	1	J1			0	TM	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	2.6E+01	1		■		2	GP	2.5E+01	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 79C

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

SAMPLE DATE 08/04/95 10/18/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	196.8	196.6	ft msl
pH	3.3	3.5	pH
Sp. conductance	1350	1469	µS/cm
Water temperature	20.2	19.5	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	3.1	3.2	well volumes
Sampling code			
Synchronous water level	196.8 (08/09/95)	196.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	8.1	1				0	GE								µg/L
Barium, total recoverable	710	1	V			0	GE								µg/L
Cadmium, total recoverable	28	1		■		2	GE	26	1		■		2	GE	µg/L
Chromium, total recoverable	<4.0	1				0	GE								µg/L
Cobalt, total recoverable	210	1		■		2	GE								µg/L
Copper, total recoverable	60	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1	V			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	0.75	1	V			0	GE								µg/L
Nickel, total recoverable	58	1	V			1	GE								µg/L
Nitrate-nitrite as nitrogen	210,000	400		■		2	GE	190,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	150	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J2			0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 79C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	3.3E+01	1				2	GP								pCi/L
Cesium-137	-5.5E-01	1	UI			0	GP								pCi/L
Cobalt-60	2.0E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	2.9E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	6.6E+02	1		■		2	GP	4.4E+02	1		■		2	GP	pCi/L
Iodine-129	8.6E+01	1				2	GP								pCi/L
Nonvolatile beta	3.0E+03	1		■		2	GP	2.4E+03	1		■		2	GP	pCi/L
Plutonium-238	1.1E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	9.7E-02	1				0	GP								pCi/L
Radium, total alpha-emitting	1.2E+02	1		■		2	GP								pCi/L
Radium-226	1.9E+01	1		■		1	GP								pCi/L
Radium-228	2.1E+01	1		■		2	GP								pCi/L
Strontium-90	1.9E+03	1		■		2	GP								pCi/L
Technetium-99	1.9E+02	1				0	GP								pCi/L
Thorium-228	-1.1E-02	1	UI			0	GP								pCi/L
Thorium-230	7.7E-02	1	UI			0	GP								pCi/L
Thorium-232	-2.4E-02	1	UI			0	GP								pCi/L
Tritium	1.1E+04	1		■		2	GP	1.1E+04	1		■		2	GP	pCi/mL
Uranium-233/234	3.2E+02	1				2	GP								pCi/L
Uranium-235	2.3E+01	1				2	GP								pCi/L
Uranium-238	3.4E+02	1				2	GP								pCi/L
Total alpha emitters	7.4E+02			■											pCi/L
Total beta emitters	2.2E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 87A

<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>
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 07/12/95 10/05/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	154.4	154.5	ft msl
pH	6.7	6.2	pH
Sp. conductance	87	104	µS/cm
Water temperature	20.5	20.0	°C
Alkalinity as CaCO ₃	32	33	mg/L
Turbidity	1	0	NTU
Volume purged	2.8	2.9	well volumes
Sampling code			
Synchronous water level	154.3 (08/09/95)	154.5 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<3.0	1	JV			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	160	1				0	GE	240	1	V			0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 87A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				0	GP	6.7E-02	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.1E+00	1	UI			0	GP	6.2E-01	1	UI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	3.4E+00	1				0	GP	4.5E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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	07/13/95	10/05/95
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FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	151.0	151.2	ft msl
pH	5.9	5.6	pH
Sp. conductance	88	88	µS/cm
Water temperature	20.6	20.2	°C
Alkalinity as CaCO ₃	5	6	mg/L
Turbidity	1	1	NTU
Volume purged	3.1	2.8	well volumes
Sampling code			
Synchronous water level	150.8 (08/09/95)	151.1 (11/14/95)	ft msl

ANALYTICAL DATA

<u>Inorganic Constituents</u>																
<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>	
Antimony, total recoverable																
Arsenic, total recoverable																
Barium, total recoverable																
Cadmium, total recoverable	<4.7	1	Y			0	WA	<2.0	1				0	GE	µg/L	
Chromium, total recoverable																
Cobalt, total recoverable																
Copper, total recoverable																
Cyanide																
Lead, total recoverable	<6.7	1	V			0	GE	<5.0	1				0	GE	µg/L	
Mercury, total recoverable																
Nickel, total recoverable																
Nitrate-nitrite as nitrogen	12,000	10		■		2	GE	6,200	10	V			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>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 87B (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.1E+00	1	JV1			0	TM	-3.5E-02	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	4.5E+00	1				0	TM	2.8E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.0E+02	1			■	2	GP	9.7E+01	1			■	2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 87C

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

SAMPLE DATE 07/12/95 10/05/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	209.7	209.5	ft msl
pH	6.0	5.4	pH
Sp. conductance	78	93	µS/cm
Water temperature	20.4	20.2	°C
Alkalinity as CaCO ₃	5	6	mg/L
Turbidity	1	0	NTU
Volume purged	3.3	2.6	well volumes
Sampling code			
Synchronous water level	209.6 (08/09/95)	209.4 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<9.4	1	V			0	GE	13	1	JV			0	WA	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	7,000	10				1	GE	7,400	10	V			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>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 87C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	4.5E-01	1	UI			0	GP	2.4E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.7E+00	1				0	GP	1.6E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	4.7E+02	1		■		2	GP	4.7E+02	1		■		2	TM	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/13/95 10/05/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	212.8	212.8	ft msl
pH	5.2	4.5	pH
Sp. conductance	54	59	µS/cm
Water temperature	28.6	21.0	°C
Alkalinity as CaCO ₃	6	0	mg/L
Turbidity	2	0	NTU
Volume purged	0.060	2.4	well volumes
Sampling code	X		
Synchronous water level	212.9 (08/09/95)	(11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	< 5.0	1				0	GE	1.8	1	J			0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	< 12	1	V			0	GE	< 5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	2,300	2				0	GE	3,300	4	V			0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 87D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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+01	1		■		2	GP	3.9E+01	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.9E+01	1				0	GP	2.8E+01	1				1	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	3.6E+01	1		■		2	GP	2.6E+01	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₁)

SAMPLE DATE 07/13/95 10/02/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	213.2	213.0	ft msl
pH	5.6	5.3	pH
Sp. conductance	47	53	µS/cm
Water temperature	20.4	19.7	°C
Alkalinity as CaCO ₃	12	6	mg/L
Turbidity	1	0	NTU
Volume purged	23	3.0	well volumes
Sampling code			
Synchronous water level	217.9 (08/09/95)	213.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	9.6	1	J			0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.95	1	J			0	WA	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.9	1	V			0	GE	14	1	V			0	WA	µg/L
Mercury, total recoverable	<0.072	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	1,500	1				0	GE	2,700	5				0	WA	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<11	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1			0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	3.1	1				1	GE								µg/L
Trichloroethylene	1.5	1	J			0	GE								µg/L
Trichlorofluoromethane	2.6	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 88C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	3.9E-02	1	UI			0	GP								pCi/L
Cesium-137	3.0E+00	1				0	GP								pCi/L
Cobalt-60	2.9E-01	1	UI			0	GP								pCi/L
Curium-242	1.4E-02	1	UI			0	GP								pCi/L
Curium-243/244	-1.8E-02	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	6.3E-01	1	UI			0	GP	1.0E-01	1	UIV			0	TM	pCi/L
Iodine-129	-2.0E-01	1	UJI			0	GP								pCi/L
Nonvolatile beta	3.3E-01	1	UI			0	GP	8.9E-01	1	UJI			0	GP	pCi/L
Plutonium-238	2.2E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	0.0E+00	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	2.0E-01	1	UJI			0	GP								pCi/L
Radium-226	3.5E-01	1				0	GP								pCi/L
Radium-228	-1.2E+00	1	UI			0	GP								pCi/L
Strontium-90	-1.7E-01	1	UIV			0	GP								pCi/L
Technetium-99	-1.7E+00	1	UI			0	GP								pCi/L
Thorium-228	6.5E-02	1	UI			0	GP								pCi/L
Thorium-230	8.6E-02	1				0	GP								pCi/L
Thorium-232	2.2E-02	1	UI			0	GP								pCi/L
Tritium	1.2E+01	1				1	GP	5.0E+01	1		■		2	GP	pCi/mL
Uranium-233/234	2.1E-02	1	UI			0	GP								pCi/L
Uranium-235	4.5E-02	1	UI			0	GP								pCi/L
Uranium-238	4.5E-02	1	UI			0	GP								pCi/L
Total alpha emitters	8.6E-02														pCi/L
Total beta emitters	3.0E+00														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 88D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75621.8 E51527.0	33.277098 °N 81.678012 °W	222.1-202.1 ft msl	282.4 ft msl	4" PVC	V	Water Table (IIB ₂)

SAMPLE DATE 08/04/95 10/16/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	217.3	217.0	ft msl
pH	3.8	4.0	pH
Sp. conductance	485	442	µS/cm
Water temperature	21.6	21.7	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	2.8	2.6	well volumes
Sampling code			
Synchronous water level	212.7 (08/09/95)	217.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	2.7	1	J			0	GE								µg/L
Barium, total recoverable	130	1	V			0	GE	110	1	V			0	GE	µg/L
Cadmium, total recoverable	1.6	1	J			0	GE	1.5	1	J			0	GE	µg/L
Chromium, total recoverable	9.1	1				0	GE								µg/L
Cobalt, total recoverable	13	1				0	GE								µg/L
Copper, total recoverable	45	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	12	1	V			0	GE	11	1	V			0	GE	µg/L
Mercury, total recoverable	14	2	V	■		2	GE								µg/L
Nickel, total recoverable	22	1	J			0	GE	13	1				0	GE	µg/L
Nitrate-nitrite as nitrogen	53,000	100		■		2	GE	53,000	40	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE	<2.0	1				0	GE	µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	93	1	V			0	GE								µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 88D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	2.8E+01	1				2	GP								pCi/L
Cesium-137	-4.0E-01	1	UI			0	GP								pCi/L
Cobalt-60	2.9E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	8.8E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	4.4E+02	1	J	■		2	GP	4.3E+02	1	J	■		2	GP	pCi/L
Iodine-129	8.4E+01	1				2	GP								pCi/L
Nonvolatile beta	7.3E+02	1	J	■		2	GP	5.7E+02	1		■		2	GP	pCi/L
Plutonium-238	-2.3E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-3.0E-04	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.0E+01	1		■		1	GP								pCi/L
Radium-226	3.0E+00	1				0	GP								pCi/L
Radium-228	5.8E+00	1		■		0	GP								pCi/L
Strontium-90	2.7E+02	1	V	■		2	GP								pCi/L
Technetium-99	6.1E+01	1				0	GP								pCi/L
Thorium-228	1.1E-01	1	UI			0	GP								pCi/L
Thorium-230	1.2E-01	1				0	GP								pCi/L
Thorium-232	0.0E+00	1	UI			0	GP								pCi/L
Tritium	1.3E+03	1		■		2	GP	1.0E+03	1		■		2	GP	pCi/mL
Uranium-233/234	2.0E+02	1	V			2	GP								pCi/L
Uranium-235	1.7E+01	1				2	GP								pCi/L
Uranium-238	2.5E+02	1	V			2	GP								pCi/L
Total alpha emitters	5.8E+02			■											pCi/L
Total beta emitters	4.2E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 89C

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

SAMPLE DATE 07/13/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	212.7	212.6	ft msl
pH	5.7	5.2	pH
Sp. conductance	55	60	µS/cm
Water temperature	20.2	19.2	°C
Alkalinity as CaCO ₃	9	9	mg/L
Turbidity	1	1	NTU
Volume purged	3.6	3.5	well volumes
Sampling code			
Synchronous water level	215.7 (08/09/95)	212.3 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	11	1	J			0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<4.3	1	JV			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.055	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	1,800	1				0	GE	3,900	2	V			0	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<10	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1			0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	5.4	1	J			0	GE								µg/L
Tetrachloroethylene	1.7	1	J			0	GE								µg/L
Trichloroethylene	1.5	1	J			0	GE								µg/L
Trichlorofluoromethane	4.1	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 89C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	6.3E-02	1	UI			0	GP								pCi/L
Cesium-137	6.7E-02	1	UI			0	GP								pCi/L
Cobalt-60	2.1E-01	1	UI			0	GP								pCi/L
Curium-242	2.8E-02	1	UI			0	GP								pCi/L
Curium-243/244	9.9E-03	1	UI			0	GP								pCi/L
Curium-245/246	5.2E-03	1	UI			0	GP								pCi/L
Gross alpha	8.5E-01	1				0	GP	4.8E-01	1	UI			0	GP	pCi/L
Iodine-129	2.7E+00	1	J			2	GP								pCi/L
Nonvolatile beta	1.3E-01	1	UI			0	GP	3.0E-01	1	UIV			0	GP	pCi/L
Plutonium-238	6.1E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-5.7E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.0E-01	1	UJI			0	GP								pCi/L
Radium-226	2.8E-01	1				0	GP								pCi/L
Radium-228	-2.1E+00	1	UI			0	GP								pCi/L
Strontium-90	2.7E-01	1	UIV			0	GP								pCi/L
Technetium-99	-3.9E-01	1	UI			0	GP								pCi/L
Thorium-228	5.4E-02	1	UI			0	GP								pCi/L
Thorium-230	8.7E-02	1	UI			0	GP								pCi/L
Thorium-232	3.3E-02	1	UI			0	GP								pCi/L
Tritium	2.0E+01	1				1	GP	2.3E+01	1		■		2	GP	pCi/mL
Uranium-233/234	1.8E-01	1	UI			0	GP								pCi/L
Uranium-235	3.7E-02	1	UI			0	GP								pCi/L
Uranium-238	-1.2E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters	2.7E+00														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/04/95 10/11/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	216.5	216.2	ft msl
pH	3.8	4.0	pH
Sp. conductance	294	134	µS/cm
Water temperature	21.5	21.3	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volume purged	2.9	2.7	well volumes
Sampling code			
Synchronous water level	216.7 (08/09/95)	216.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	3.6	1	J			0	GE								µg/L
Barium, total recoverable	55	1	V			0	GE								µg/L
Cadmium, total recoverable	2.6	1				1	GE	1.7	1	J			0	GE	µg/L
Chromium, total recoverable	3.0	1	J			0	GE								µg/L
Cobalt, total recoverable	13	1				0	GE								µg/L
Copper, total recoverable	24	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<4.9	1	JV			0	GE	6.5	1				0	GE	µg/L
Mercury, total recoverable	3.6	1	V	■		2	GE								µg/L
Nickel, total recoverable	10	1	V			0	GE								µg/L
Nitrate-nitrite as nitrogen	29,000	20		■		2	GE	9,900	10	V			1	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	39	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 89D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	9.6E+00	1				2	GP								pCi/L
Cesium-137	1.0E+00	1	UI			0	GP								pCi/L
Cobalt-60	1.9E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	6.9E+00	1				1	GP								pCi/L
Curium-245/246															
Gross alpha	3.0E+02	1	J	■		2	GP	1.1E+02	1		■		2	GP	pCi/L
Iodine-129	7.4E+01	1				2	GP								pCi/L
Nonvolatile beta	8.7E+02	1	J	■		2	GP	2.9E+02	1		■		2	GP	pCi/L
Plutonium-238	1.4E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	0.0E+00	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	7.7E+00	1		■		0	GP								pCi/L
Radium-226	6.4E-01	1				0	GP								pCi/L
Radium-228	2.3E+00	1				0	GP								pCi/L
Strontium-90	3.4E+02	1	V	■		2	GP								pCi/L
Technetium-99	3.8E+01	1				0	GP								pCi/L
Thorium-228	6.0E-02	1	UI			0	GP								pCi/L
Thorium-230	7.6E-02	1	UI			0	GP								pCi/L
Thorium-232	1.4E-02	1	UI			0	GP								pCi/L
Tritium	1.3E+03	1		■		2	GP	7.8E+02	1		■		2	GP	pCi/mL
Uranium-233/234	9.9E+01	1	V			2	GP								pCi/L
Uranium-235	8.1E+00	1				1	GP								pCi/L
Uranium-238	1.2E+02	1	V			2	GP								pCi/L
Total alpha emitters	2.4E+02			■											pCi/L
Total beta emitters	4.5E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 90C

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

SAMPLE DATE 07/14/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	211.5	211.2	ft msl
pH	6.0	5.9	pH
Sp. conductance	183	183	µS/cm
Water temperature	21.0	20.5	°C
Alkalinity as CaCO ₃	24	22	mg/L
Turbidity	1	0	NTU
Volume purged	3.0	1.8	well volumes
Sampling code			
Synchronous water level	211.3 (08/09/95)	211.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	41	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.062	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	13,000	10		■		2	GE	13,000	10		■		2	GE	µg/L
Selenium, total recoverable	<5.0	1	V			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	16	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.1	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	1.6	1	J			0	GE								µg/L
Trichloroethylene	1.3	1	J			0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 90C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	1.8E-02	1	UI			0	GP								pCi/L
Cesium-137	-1.3E+00	1	UI			0	GP								pCi/L
Cobalt-60	2.3E+00	1	UI			0	GP								pCi/L
Curium-242	1.6E-01	1	UIV			0	GP								pCi/L
Curium-243/244	5.4E-03	1	UI			0	GP								pCi/L
Curium-245/246	5.4E-01	1	UIV			0	GP								pCi/L
Gross alpha	3.4E+00	1				0	GP	1.5E+00	1				0	GP	pCi/L
Iodine-129	9.8E-01	1				1	GP								pCi/L
Nonvolatile beta	3.3E+01	1				1	GP	1.5E+01	1				0	GP	pCi/L
Plutonium-238	-7.0E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-4.4E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.7E+00	1	J			0	GP								pCi/L
Radium-226	8.7E-01	1				0	GP								pCi/L
Radium-228	-1.5E-01	1	UI			0	GP								pCi/L
Strontium-90	6.1E+00	1	V			1	GP								pCi/L
Technetium-99	2.1E+00	1	UI			0	GP								pCi/L
Thorium-228	-2.0E-02	1	UI			0	GP								pCi/L
Thorium-230	1.4E-01	1				0	GP								pCi/L
Thorium-232	1.9E-03	1	UI			0	GP								pCi/L
Tritium	6.7E+02	1		■		2	GP	5.5E+02	1		■		2	GP	pCi/mL
Uranium-233/234	1.4E-01	1				0	GP								pCi/L
Uranium-235	-2.8E-03	1	UI			0	GP								pCi/L
Uranium-238	5.2E-02	1				0	GP								pCi/L
Total alpha emitters	3.3E-01														pCi/L
Total beta emitters	7.1E+00														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/18/95 10/17/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation			
pH	3.5	3.6	pH
Sp. conductance	609	598	µS/cm
Water temperature	23.0	17.5	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	6	1	NTU
Volume purged			
Sampling code	X	X	
Synchronous water level	(08/09/95)	215.7 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	7.1	1				0	GE								µg/L
Barium, total recoverable	170	1	V			0	GE								µg/L
Cadmium, total recoverable	7.1	1		■		2	GE	7.3	1		■		2	GE	µg/L
Chromium, total recoverable	2.1	1	J			0	GE								µg/L
Cobalt, total recoverable	15	1				0	GE								µg/L
Copper, total recoverable	100	1				0	GE								µg/L
Cyanide	<10	1	V			0	GE								µg/L
Lead, total recoverable	35	1	V	■		1	GE	24	1		■		0	GE	µg/L
Mercury, total recoverable	5.2	1	J	■		2	GE								µg/L
Nickel, total recoverable	16	1	V			0	GE								µg/L
Nitrate-nitrite as nitrogen	47,000	100		■		2	GE	67,000	50	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	72	1	V			0	GE								µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1	J1			0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	J1			0	GE								µg/L
Phenols	<5.0	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1	J1			0	GE								µg/L
Trichloroethylene	<2.0	1	J1			0	GE								µg/L
Trichlorofluoromethane	<2.0	1	J1			0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 90D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	3.9E+00	1				1	GP								pCi/L
Cesium-137	6.4E-01	1	UI			0	GP								pCi/L
Cobalt-60	5.6E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	3.0E+00	1				0	GP								pCi/L
Curium-245/246															
Gross alpha	5.2E+02	1		■		2	GP	3.7E+02	1		■		2	GP	pCi/L
Iodine-129	1.7E+02	1				2	GP								pCi/L
Nonvolatile beta	1.3E+03	1		■		2	GP	1.1E+03	1		■		2	GP	pCi/L
Plutonium-238	2.3E-01	1	V			0	GP								pCi/L
Plutonium-239/240	2.4E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.9E+01	1	V	■		1	GP								pCi/L
Radium-226	1.7E+01	1		■		1	GP								pCi/L
Radium-228	2.2E+01	1		■		2	GP								pCi/L
Strontium-90	5.0E+02	1	V	■		2	GP								pCi/L
Technetium-99	1.1E+02	1				0	GP								pCi/L
Thorium-228	2.2E+00	1	V			0	GP								pCi/L
Thorium-230	2.5E-01	1				0	GP								pCi/L
Thorium-232	-4.2E-04	1	UI			0	GP								pCi/L
Tritium	5.7E+03	1		■		2	GP	4.3E+03	1		■		2	GP	pCi/mL
Uranium-233/234	2.0E+02	1				2	GP								pCi/L
Uranium-235	1.8E+01	1				2	GP								pCi/L
Uranium-238	2.2E+02	1				2	GP								pCi/L
Total alpha emitters	4.5E+02			■											pCi/L
Total beta emitters	8.1E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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	Barnwell (IIB,)

SAMPLE DATE 08/11/95 10/10/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	211.6	211.3	ft msl
pH	5.3	5.2	pH
Sp. conductance	194	206	µS/cm
Water temperature	22.0	20.6	°C
Alkalinity as CaCO ₃	5	3	mg/L
Turbidity	4	6	NTU
Volume purged	0.71	0.69	well volumes
Sampling code	X	X	
Synchronous water level	210.6 (08/09/95)	211.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	1.3	1	J			0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	71	1	J3			0	GE								µg/L
Cadmium, total recoverable	3.0	1	V			1	GE	2.9	1				1	GE	µg/L
Chromium, total recoverable	<4.0	1				0	GE								µg/L
Cobalt, total recoverable	12	1	V			0	GE								µg/L
Copper, total recoverable	19	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	8.3	1				0	GE	7.2	1				0	GE	µg/L
Mercury, total recoverable	<0.11	1	JV			0	GE								µg/L
Nickel, total recoverable	7.4	1	J			0	GE								µg/L
Nitrate-nitrite as nitrogen	20,000	10		■		2	GE	18,000	20		■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	3.8	1	J	■		2	GE								µg/L
Vanadium, total recoverable	0.27	1	J			0	GE								µg/L
Zinc, total recoverable	48	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<0.50	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	2.4	1				0	GE								µg/L
Dichloromethane	<1.1	1	V			0	GE								µg/L
Phenols															
Tetrachloroethylene	<0.050	1				0	GE								µg/L
Trichloroethylene	2.2	1				0	GE								µg/L
Trichlorofluoromethane	0.20	1	J			0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 91C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	9.9E-02	1				0	GP								pCi/L
Cesium-137	-1.1E-01	1	UI			0	GP								pCi/L
Cobalt-60	2.0E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	8.5E-02	1				0	GP								pCi/L
Curium-245/246															
Gross alpha	3.6E+01	1		■		2	GP	3.5E+01	1		■		2	GP	pCi/L
Iodine-129	4.9E+01	1				2	GP								pCi/L
Nonvolatile beta	3.9E+02	1	J	■		2	GP	3.7E+02	1		■		2	GP	pCi/L
Plutonium-238	5.1E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	0.0E+00	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.7E+01	1		■		1	GP								pCi/L
Radium-226	1.5E+01	1		■		1	GP								pCi/L
Radium-228	4.7E+00	1				0	GP								pCi/L
Strontium-90	2.4E+02	1	V	■		2	GP								pCi/L
Technetium-99	3.1E+01	1				0	GP								pCi/L
Thorium-228	9.3E-02	1				0	GP								pCi/L
Thorium-230	4.6E-02	1	UI			0	GP								pCi/L
Thorium-232	1.5E-02	1	UI			0	GP								pCi/L
Tritium	5.6E+02	1		■		2	GP	5.6E+02	1		■		2	GP	pCi/mL
Uranium-233/234	1.4E+00	1	V			0	GP								pCi/L
Uranium-235	2.4E-02	1	UI			0	GP								pCi/L
Uranium-238	1.5E+00	1	V			0	GP								pCi/L
Total alpha emitters	3.1E+00														pCi/L
Total beta emitters	3.2E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 91D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 (11B ₂)

SAMPLE DATE 08/04/95 10/10/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	214.3	215.5	ft msl
pH	3.7	3.8	pH
Sp. conductance	182	199	µS/cm
Water temperature	21.7	23.7	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	2	NTU
Volume purged	4.6	2.8	well volumes
Sampling code			
Synchronous water level	219.0 (08/09/95)	213.9 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	3.9	1	J			0	GE								µg/L
Barium, total recoverable	53	1	V			0	GE								µg/L
Cadmium, total recoverable	0.50	1	J			0	GE	0.85	1	J			0	GE	µg/L
Chromium, total recoverable	1.9	1	J			0	GE								µg/L
Cobalt, total recoverable	1.0	1	J			0	GE								µg/L
Copper, total recoverable	17	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1	V			0	GE	10	1				0	GE	µg/L
Mercury, total recoverable	<0.20	1	JV			0	GE								µg/L
Nickel, total recoverable	<3.9	1	JV			0	GE								µg/L
Nitrate-nitrite as nitrogen	15,000	10		■		2	GE	15,000	10		■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<19	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 91D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	1.8E+00	1				0	GP								pCi/L
Cesium-137	8.5E-01	1	UI			0	GP								pCi/L
Cobalt-60	-1.1E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	2.1E+00	1				0	GP								pCi/L
Curium-245/246															
Gross alpha	1.5E+02	1	J	■		2	GP	9.7E+01	1		■		2	GP	pCi/L
Iodine-129	1.4E+01	1				2	GP								pCi/L
Nonvolatile beta	1.4E+02	1	J	■		2	GP	1.0E+02	1		■		2	GP	pCi/L
Plutonium-238	1.4E-01	1				0	GP								pCi/L
Plutonium-239/240	4.6E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	5.0E+00	1				0	GP								pCi/L
Radium-226	2.4E-01	1				0	GP								pCi/L
Radium-228	4.1E+00	1				0	GP								pCi/L
Strontium-90	3.6E+01	1	V	■		2	GP								pCi/L
Technetium-99	2.1E+01	1				0	GP								pCi/L
Thorium-228	1.1E-01	1	UI			0	GP								pCi/L
Thorium-230	-3.3E-02	1	UI			0	GP								pCi/L
Thorium-232	-2.3E-02	1	UI			0	GP								pCi/L
Tritium	3.5E+02	1		■		2	GP	3.3E+02	1		■		2	GP	pCi/mL
Uranium-233/234	6.1E+01	1	V			2	GP								pCi/L
Uranium-235	4.4E+00	1				0	GP								pCi/L
Uranium-238	8.8E+01	1	V			2	GP								pCi/L
Total alpha emitters	1.6E+02			■											pCi/L
Total beta emitters	7.5E+01			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 92C

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

SAMPLE DATE 08/14/95 10/11/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	210.2	210.0	ft msl
pH	4.9	4.8	pH
Sp. conductance	355	375	μS/cm
Water temperature	21.2	21.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volume purged	2.2	2.2	well volumes
Sampling code			
Synchronous water level	210.2 (08/09/95)	210.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	μg/L
Barium, total recoverable	140	1	V			0	GE	120	1				0	GE	μg/L
Cadmium, total recoverable	5.9	1		■		2	GE	4.8	1				1	GE	μg/L
Chromium, total recoverable	2.0	1	J			0	GE	<4.0	1				0	GE	μg/L
Cobalt, total recoverable	42	1				2	GE								μg/L
Copper, total recoverable	6.1	1				0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	27	1	V	■		1	GE	32	1		■		1	GE	μg/L
Mercury, total recoverable	<0.13	1	JV			0	GE	0.14	1	JV			0	GE	μg/L
Nickel, total recoverable	18	1	V			0	GE								μg/L
Nitrate-nitrite as nitrogen	39,000	20		■		2	GE	84,000	40	V	■		2	GE	μg/L
Selenium, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	μg/L
Silver, total recoverable	<2.0	1				0	GE	<2.0	1				0	GE	μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	98	1	V			0	GE								μg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1	Y			0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								μg/L
Dichloromethane	<2.0	1	Y			0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1	Y			0	GE								μg/L
Trichloroethylene	3.4	1	Y			1	GE								μg/L
Trichlorofluoromethane	<2.0	1	Y			0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 92C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	8.7E-02	1				0	GP								pCi/L
Cesium-137	3.9E-01	1	UI			0	GP								pCi/L
Cobalt-60	1.4E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	1.1E-02	1	UI			0	GP								pCi/L
Curium-245/246															
Gross alpha	3.7E+01	1		■		2	GP	2.3E+01	1		■		2	GP	pCi/L
Iodine-129	2.2E+01	1				2	GP								pCi/L
Nonvolatile beta	3.5E+02	1	J	■		2	GP	3.2E+02	1		■		2	GP	pCi/L
Plutonium-238	8.7E-03	1	UI			0	GP								pCi/L
Plutonium-239/240	-1.3E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.9E+01	1		■		1	GP								pCi/L
Radium-226	3.0E+01	1		■		2	GP								pCi/L
Radium-228	3.1E+00	1				0	GP								pCi/L
Strontium-90	1.7E+02	1	V	■		2	GP								pCi/L
Technetium-99	5.8E+01	1				0	GP								pCi/L
Thorium-228	1.9E-01	1				0	GP								pCi/L
Thorium-230	7.5E-02	1				0	GP								pCi/L
Thorium-232	0.0E+00	1	UI			0	GP								pCi/L
Tritium	1.5E+03	1		■		2	GP	1.4E+03	1		■		2	GP	pCi/mL
Uranium-233/234	1.8E+00	1	V			0	GP								pCi/L
Uranium-235	5.6E-02	1	UI			0	GP								pCi/L
Uranium-238	1.8E+00	1	V			0	GP								pCi/L
Total alpha emitters	4.0E+00														pCi/L
Total beta emitters	2.6E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/14/95 10/17/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	212.6	212.2	ft msl
pH	3.4	3.4	pH
Sp. conductance	1240	1239	µS/cm
Water temperature	22.4	21.7	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	1	NTU
Volume purged	3.2	2.9	well volumes
Sampling code			
Synchronous water level	212.7 (08/09/95)	212.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	11	1				0	GE								µg/L
Barium, total recoverable	470	1	V			0	GE								µg/L
Cadmium, total recoverable	19	1	V	■		2	GE	23	1		■		2	GE	µg/L
Chromium, total recoverable	1.8	1	J			0	GE								µg/L
Cobalt, total recoverable	21	1	V			1	GE								µg/L
Copper, total recoverable	86	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	29	1		■		1	GE	15	1		■		0	GE	µg/L
Mercury, total recoverable	0.74	1	V			0	GE								µg/L
Nickel, total recoverable	28	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	170,000	400		■		2	GE	200,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	0.26	1	J			0	GE								µg/L
Zinc, total recoverable	110	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	0.070	1	J			0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<0.52	1	JV			0	GE								µg/L
Dichloromethane	<1.1	1	V			0	GE								µg/L
Phenols															
Tetrachloroethylene	0.090	1				0	GE								µg/L
Trichloroethylene	0.13	1				0	GE								µg/L
Trichlorofluoromethane	0.060	1	J			0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 92D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	2.1E+01	1				2	GP								pCi/L
Cesium-137	7.3E-01	1	UI			0	GP								pCi/L
Cobalt-60	4.4E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	1.8E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	7.4E+02	1		■		2	GP	8.3E+02	1		■		2	GP	pCi/L
Iodine-129	1.5E+02	1				2	GP								pCi/L
Nonvolatile beta	2.5E+03	1		■		2	GP	2.0E+03	1		■		2	GP	pCi/L
Plutonium-238	8.3E+00	1				2	GP								pCi/L
Plutonium-239/240	5.8E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.4E+02	1		■		2	GP								pCi/L
Radium-226	2.3E+01	1		■		2	GP								pCi/L
Radium-228	4.7E+01	1		■		2	GP								pCi/L
Strontium-90	1.1E+03	1		■		2	GP								pCi/L
Technetium-99	9.0E+01	1				0	GP								pCi/L
Thorium-228	3.3E-01	1				0	GP								pCi/L
Thorium-230	4.3E-02	1	UI			0	GP								pCi/L
Thorium-232	-3.7E-03	1	UIV			0	GP								pCi/L
Tritium	8.2E+03	1		■		2	GP	7.9E+03	1		■		2	GP	pCi/mL
Uranium-233/234	4.0E+02	1				2	GP								pCi/L
Uranium-235	3.2E+01	1				2	GP								pCi/L
Uranium-238	4.6E+02	1				2	GP								pCi/L
Total alpha emitters	9.4E+02			■											pCi/L
Total beta emitters	1.3E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₁)

SAMPLE DATE 07/17/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	209.6	209.2	ft msl
pH	5.0	4.7	pH
Sp. conductance	386	385	µS/cm
Water temperature	20.2	19.6	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	1	0	NTU
Volume purged	3.1	3.7	well volumes
Sampling code			
Synchronous water level	209.4 (08/09/95)	209.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	3.0	1	J			0	GE								µg/L
Arsenic, total recoverable	1.5	1	J			0	GE								µg/L
Barium, total recoverable	73	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.57	1	J			0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	2.6	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.048	1	JV			0	GE								µg/L
Nickel, total recoverable	11	1	J			0	GE								µg/L
Nitrate-nitrite as nitrogen	42,000	40		■		2	GE	46,000	40		■		2	GE	µg/L
Selenium, total recoverable	1.8	1	J			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	110	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.7	1				0	GE								µg/L
Dichloromethane	<2.0	1	JV			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	1.8	1	J			0	GE								µg/L
Trichlorofluoromethane	2.2	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 93C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	7.7E-02	1	UI			0	GP								pCi/L
Cesium-137	-3.5E-01	1	UI			0	GP								pCi/L
Cobalt-60	0.0E+00	1	UI			0	GP								pCi/L
Curium-242	2.0E-01	1	UIV			0	GP								pCi/L
Curium-243/244	6.1E-02	1	UI			0	GP								pCi/L
Curium-245/246	2.0E-01	1	UIV			0	GP								pCi/L
Gross alpha	6.7E+00	1				0	GP	5.3E+00	1				0	GP	pCi/L
Iodine-129	1.1E+01	1				2	GP								pCi/L
Nonvolatile beta	5.1E+01	1	J	■		2	GP	4.2E+01	1				1	GP	pCi/L
Plutonium-238	4.5E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	2.5E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	3.1E+00	1				0	GP								pCi/L
Radium-226	1.6E+00	1				0	GP								pCi/L
Radium-228	-3.3E-01	1	UI			0	GP								pCi/L
Strontium-90	1.4E+01	1	V	■		2	GP								pCi/L
Technetium-99	4.2E+01	1				0	GP								pCi/L
Thorium-228	4.0E-02	1	UI			0	GP								pCi/L
Thorium-230	4.6E-02	1	UI			0	GP								pCi/L
Thorium-232	3.4E-02	1	UI			0	GP								pCi/L
Tritium	1.8E+03	1	J	■		2	GP	1.5E+03	1				2	GP	pCi/mL
Uranium-233/234	-1.1E-02	1	UI			0	GP								pCi/L
Uranium-235	-3.6E-03	1	UI			0	GP								pCi/L
Uranium-238	-2.1E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters	6.6E+01			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 93D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74888.5 E50452.4	33.273723 °N 81.679416 °W	217.9-197.9 ft msl	276.1 ft msl	4" PVC	V	Water Table (IIB ₂)

SAMPLE DATE 08/11/95 10/17/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	211.3	210.9	ft msl
pH	3.8	3.6	pH
Sp. conductance	907	944	µS/cm
Water temperature	23.3	19.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	1	NTU
Volume purged	0.79	0.71	well volumes
Sampling code	X	X	
Synchronous water level	211.3 (08/09/95)	210.9 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	16	1				0	GE								µg/L
Barium, total recoverable	380	1	V			0	GE								µg/L
Cadmium, total recoverable	13	1	V	■		2	GE	14	1		■		2	GE	µg/L
Chromium, total recoverable	4.6	1				0	GE								µg/L
Cobalt, total recoverable	13	1	V			0	GE								µg/L
Copper, total recoverable	52	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	8.5	1				0	GE	6.8	1				0	GE	µg/L
Mercury, total recoverable	0.53	1	V			0	GE								µg/L
Nickel, total recoverable	21	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	120,000	400		■		2	GE	120,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	57	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 93D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	3.4E+00	1				1	GP								pCi/L
Cesium-137	-4.8E-01	1	UI			0	GP								pCi/L
Cobalt-60	5.5E-01	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	2.6E+00	1				0	GP								pCi/L
Curium-245/246															
Gross alpha	1.8E+02	1		■		2	GP	1.9E+02	1		■		2	GP	pCi/L
Iodine-129	1.3E+02	1				2	GP								pCi/L
Nonvolatile beta	1.8E+03	1		■		2	GP	1.4E+03	1		■		2	GP	pCi/L
Plutonium-238	4.2E-01	1				0	GP								pCi/L
Plutonium-239/240	1.1E+00	1				0	GP								pCi/L
Radium, total alpha-emitting	3.1E+01	1		■		2	GP								pCi/L
Radium-226	2.0E+01	1		■		2	GP								pCi/L
Radium-228	1.7E+01	1		■		1	GP								pCi/L
Strontium-90	1.1E+03	1		■		2	GP								pCi/L
Technetium-99	9.5E+01	1				0	GP								pCi/L
Thorium-228	5.7E-02	1	UI			0	GP								pCi/L
Thorium-230	2.5E-02	1	UI			0	GP								pCi/L
Thorium-232	1.2E-02	1	UIV			0	GP								pCi/L
Tritium	7.9E+03	1		■		2	GP	7.0E+03	1		■		2	GP	pCi/mL
Uranium-233/234	1.1E+02	1				2	GP								pCi/L
Uranium-235	8.3E+00	1				1	GP								pCi/L
Uranium-238	1.5E+02	1				2	GP								pCi/L
Total alpha emitters	2.7E+02			■											pCi/L
Total beta emitters	1.3E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 94C

<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>
N74869.0 E50180.0	33.273235 °N 81.680096 °W	149.8-139.8 ft msl	281.1 ft msl	4" PVC	V	Barnwell (IIB ₁)

SAMPLE DATE 08/10/95 10/17/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	208.6	208.3	ft msl
pH		4.2	pH
Sp. conductance		1931	µS/cm
Water temperature		19.0	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		8	NTU
Volume purged		0.58	well volumes
Sampling code	P	X	
Synchronous water level	208.6 (08/10/95)	208.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								26	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								7.4	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen								280,000	200	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 94C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								8.8E+01	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta								2.3E+03	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								1.0E+04	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/14/95 10/16/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	210.3	210.0	ft msl
pH	3.2	3.3	pH
Sp. conductance	1140	1114	µS/cm
Water temperature	21.7	20.4	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	4.0	5.8	well volumes
Sampling code			
Synchronous water level	210.4 (08/10/95)	210.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	2.9	1	J			0	GE								µg/L
Barium, total recoverable	570	1	V			0	GE								µg/L
Cadmium, total recoverable	3.6	1	V			1	GE	3.6	1				1	GE	µg/L
Chromium, total recoverable	3.1	1	J			0	GE								µg/L
Cobalt, total recoverable	30	1	V			1	GE								µg/L
Copper, total recoverable	62	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	1.7	1	J			0	GE	1.4	1	J			0	GE	µg/L
Mercury, total recoverable	0.45	1	V			0	GE								µg/L
Nickel, total recoverable	26	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	150,000	400		■		2	GE	120,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	2.1	1	J	■		2	GE								µg/L
Vanadium, total recoverable	0.94	1	J			0	GE								µg/L
Zinc, total recoverable	83	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	0.070	1	J			0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<1.0	1	V			0	GE								µg/L
Dichloromethane	<1.0	1	V			0	GE								µg/L
Phenols															
Tetrachloroethylene	0.090	1				0	GE								µg/L
Trichloroethylene	10	1		■		2	GE								µg/L
Trichlorofluoromethane	0.070	1	J			0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 94DR (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	6.7E+01	1				2	GP								pCi/L
Cesium-137	2.4E+02	1				2	GP								pCi/L
Cobalt-60	3.8E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	1.3E+02	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	9.5E+02	1		■		2	GP	8.9E+02	1		■		2	GP	pCi/L
Iodine-129	1.8E+02	1				2	GP								pCi/L
Nonvolatile beta	1.6E+03	1		■		2	GP	1.3E+03	1		■		2	GP	pCi/L
Plutonium-238	6.5E-01	1				0	GP								pCi/L
Plutonium-239/240	1.6E+00	1				0	GP								pCi/L
Radium, total alpha-emitting	5.8E+01	1		■		2	GP								pCi/L
Radium-226	1.2E+01	1		■		1	GP								pCi/L
Radium-228	4.8E+01	1		■		2	GP								pCi/L
Strontium-90	4.4E+02	1		■		2	GP								pCi/L
Technetium-99	9.9E+01	1				0	GP								pCi/L
Thorium-228	3.7E-01	1				0	GP								pCi/L
Thorium-230	1.1E-01	1	UI			0	GP								pCi/L
Thorium-232	9.1E-02	1	UIV			0	GP								pCi/L
Tritium	7.5E+03	1		■		2	GP	6.6E+03	1		■		2	GP	pCi/mL
Uranium-233/234	4.8E+02	1				2	GP								pCi/L
Uranium-235	5.0E+01	1				2	GP								pCi/L
Uranium-238	9.3E+02	1				2	GP								pCi/L
Total alpha emitters	1.7E+03			■											pCi/L
Total beta emitters	1.0E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 95CR

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

SAMPLE DATE	08/14/95	10/17/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	208.0	207.7	ft msl
pH	3.8	3.8	pH
Sp. conductance	1710	1806	µS/cm
Water temperature	21.8	20.4	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	1	NTU
Volume purged	3.3	3.1	well volumes
Sampling code			
Synchronous water level	208.0 (08/10/95)	207.7 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	2.9	1	J			0	GE								µg/L
Barium, total recoverable	970	1	V			0	GE								µg/L
Cadmium, total recoverable	17	1	V	■		2	GE	18	1		■		2	GE	µg/L
Chromium, total recoverable	<4.0	1				0	GE								µg/L
Cobalt, total recoverable	500	1	V	■		2	GE								µg/L
Copper, total recoverable	48	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	3.2	1	J			0	GE	1.2	1	J			0	GE	µg/L
Mercury, total recoverable	1.3	1	V			1	GE								µg/L
Nickel, total recoverable	100	1		■		2	GE								µg/L
Nitrate-nitrite as nitrogen	270,000	800		■		2	GE	250,000	200	V	■		2	GE	µg/L
Selenium, total recoverable	4.3	1	J			0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	300	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 95CR (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	8.6E+00	1				2	GP								pCi/L
Cesium-137	1.2E+00	1	UI			0	GP								pCi/L
Cobalt-60	5.1E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	1.7E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	7.8E+02	1		■		2	GP	6.2E+02	1		■		2	GP	pCi/L
Iodine-129	8.7E+01	1				2	GP								pCi/L
Nonvolatile beta	2.3E+03	1		■		2	GP	2.1E+03	1		■		2	GP	pCi/L
Plutonium-238	5.6E+00	1				1	GP								pCi/L
Plutonium-239/240	3.5E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.5E+02	1		■		2	GP								pCi/L
Radium-226	1.1E+02	1		■		2	GP								pCi/L
Radium-228	2.1E+01	1		■		2	GP								pCi/L
Strontium-90	1.3E+03	1		■		2	GP								pCi/L
Technetium-99	2.6E+02	1				0	GP								pCi/L
Thorium-228	3.3E-02	1	UI			0	GP								pCi/L
Thorium-230	5.4E-02	1	UI			0	GP								pCi/L
Thorium-232	-3.2E-03	1	UIV			0	GP								pCi/L
Tritium	1.1E+04	1		■		2	GP	1.1E+04	1		■		2	GP	pCi/mL
Uranium-233/234	3.7E+02	1				2	GP								pCi/L
Uranium-235	3.2E+01	1				2	GP								pCi/L
Uranium-238	3.7E+02	1				2	GP								pCi/L
Total alpha emitters	8.0E+02			■											pCi/L
Total beta emitters	1.7E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/14/95 10/17/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	256.2	210.0	ft msl
pH	3.2	3.3	pH
Sp. conductance	1460	1481	µS/cm
Water temperature	22.3	20.3	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volume purged	1.6	4.4	well volumes
Sampling code			
Synchronous water level	210.4 (08/10/95)	210.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	400	1	V			0	GE								µg/L
Cadmium, total recoverable	1.8	1	JV			0	GE	0.85	1	J			0	GE	µg/L
Chromium, total recoverable	2.0	1	J			0	GE								µg/L
Cobalt, total recoverable	31	1	V			1	GE								µg/L
Copper, total recoverable	37	1				0	GE								µg/L
Cyanide	2.7	1	J			0	GE								µg/L
Lead, total recoverable	13	1				0	GE	14	1				0	GE	µg/L
Mercury, total recoverable	0.71	1	V			0	GE								µg/L
Nickel, total recoverable	18	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	200,000	400		■		2	GE	180,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	1.6	1	J			0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	2.5	1	J	■		2	GE								µg/L
Vanadium, total recoverable	0.72	1	J			0	GE								µg/L
Zinc, total recoverable	53	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	0.070	1	J			0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<0.69	1	JV			0	GE								µg/L
Dichloromethane	<1.0	1	V			0	GE								µg/L
Phenols															
Tetrachloroethylene	0.080	1				0	GE								µg/L
Trichloroethylene	0.070	1				0	GE								µg/L
Trichlorofluoromethane	<0.50	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 95DR (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	5.1E+01	1				2	GP								pCi/L
Cesium-137	3.5E+02	1				2	GP								pCi/L
Cobalt-60	2.1E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	5.1E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	1.0E+03	1		■		2	GP	9.1E+02	1		■		2	GP	pCi/L
Iodine-129	7.2E+02	1				2	GP								pCi/L
Nonvolatile beta	1.2E+03	1		■		2	GP	8.7E+02	1		■		2	GP	pCi/L
Plutonium-238	7.4E-01	1				0	GP								pCi/L
Plutonium-239/240	1.3E+00	1				0	GP								pCi/L
Radium, total alpha-emitting	4.6E+01	1		■		2	GP								pCi/L
Radium-226	7.7E+00	1		■		0	GP								pCi/L
Radium-228	3.6E+01	1		■		2	GP								pCi/L
Strontium-90	2.0E+02	1		■		2	GP								pCi/L
Technetium-99	9.3E+01	1				0	GP								pCi/L
Thorium-228	2.0E-01	1	UI			0	GP								pCi/L
Thorium-230	6.2E-02	1	UI			0	GP								pCi/L
Thorium-232	-1.6E-02	1	UIV			0	GP								pCi/L
Tritium	9.7E+03	1		■		2	GP	9.0E+03	1		■		2	GP	pCi/mL
Uranium-233/234	3.6E+02	1				2	GP								pCi/L
Uranium-235	4.3E+01	1				2	GP								pCi/L
Uranium-238	9.2E+02	1				2	GP								pCi/L
Total alpha emitters	1.4E+03			■											pCi/L
Total beta emitters	1.4E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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 07/14/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	153.5	153.6	ft msl
pH	7.0	7.3	pH
Sp. conductance	171	175	µS/cm
Water temperature	20.5	20.0	°C
Alkalinity as CaCO ₃	68	71	mg/L
Turbidity	1	0	NTU
Volume purged	4.5	3.1	well volumes
Sampling code			
Synchronous water level	153.5 (08/09/95)	153.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	36	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.16	1	J			0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.062	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	1,000	1				0	GE	690	1	V			0	GE	µg/L
Selenium, total recoverable	<1.3	1	JV			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	3.8	1	J			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 96AR (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	5.2E-02	1	UI			0	GP								pCi/L
Cesium-137	-3.4E-01	1	UI			0	GP								pCi/L
Cobalt-60	2.1E-01	1	UI			0	GP								pCi/L
Curium-242	-6.0E-03	1	UI			0	GP								pCi/L
Curium-243/244	-6.3E-04	1	UI			0	GP								pCi/L
Curium-245/246	5.2E-03	1	UI			0	GP								pCi/L
Gross alpha	6.7E-01	1	UJI			0	GP	5.7E-01	1	UJI			0	GP	pCi/L
Iodine-129	2.5E-01	1	UJI			0	GP								pCi/L
Nonvolatile beta	1.1E+00	1	UI			0	GP	2.4E+00	1	J			0	GP	pCi/L
Plutonium-238	5.7E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	1.3E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	8.0E-01	1	J			0	GP								pCi/L
Radium-226	4.3E-01	1				0	GP								pCi/L
Radium-228	8.5E-01	1	UI			0	GP								pCi/L
Strontium-90	9.5E-02	1	UIV			0	GP								pCi/L
Technetium-99	3.3E+00	1	UI			0	GP								pCi/L
Thorium-228	4.2E-02	1	UI			0	GP								pCi/L
Thorium-230	-2.9E-04	1	UI			0	GP								pCi/L
Thorium-232	-1.5E-02	1	UI			0	GP								pCi/L
Tritium	2.1E+01	1		■		2	GP	1.6E+01	1				1	GP	pCi/mL
Uranium-233/234	1.3E-01	1	UI			0	GP								pCi/L
Uranium-235	-6.5E-03	1	UI			0	GP								pCi/L
Uranium-238	0.0E+00	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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 07/20/95 10/04/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	152.5	152.6	ft msl
pH	6.9	6.4	pH
Sp. conductance	254	245	µS/cm
Water temperature	20.7	20.3	°C
Alkalinity as CaCO ₃	71	82	mg/L
Turbidity	1	1	NTU
Volume purged	3.7	3.2	well volumes
Sampling code			
Synchronous water level	152.4 (08/09/95)	152.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	41	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<10	1				0	GE								µg/L
Lead, total recoverable	2.0	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.20	1				0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	13,000	20		■		2	GE	9,600	10	V			1	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<3.6	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<0.50	1	J1			0	GE								µg/L
Bis(2-ethylhexyl) phthalate	0.53	1	J			0	GE								µg/L
Dichloromethane	0.49	1	J1			0	GE								µg/L
Phenols															
Tetrachloroethylene	<0.050	1	J1			0	GE								µg/L
Trichloroethylene	<0.050	1	J1			0	GE								µg/L
Trichlorofluoromethane	<0.50	1	J1			0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 97A (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	-1.9E-02	1	UI			0	GP								pCi/L
Cesium-137	3.5E-01	1	UI			0	GP								pCi/L
Cobalt-60	-2.4E-01	1	UI			0	GP								pCi/L
Curium-242	-1.3E-02	1	UI			0	GP								pCi/L
Curium-243/244	-1.6E-03	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	2.0E+00	1	J			0	GP	1.4E+00	1				0	GP	pCi/L
Iodine-129	3.1E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	3.8E+00	1				0	GP	3.8E+00	1				0	GP	pCi/L
Plutonium-238	-6.3E-03	1	UI			0	GP								pCi/L
Plutonium-239/240	0.0E+00	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	6.0E-01	1				0	GP								pCi/L
Radium-226	7.3E-01	1				0	GP								pCi/L
Radium-228	-6.7E-01	1	UJI			0	GP								pCi/L
Strontium-90	2.8E+00	1	UIV			0	GP								pCi/L
Technetium-99	1.8E+01	1				0	GP								pCi/L
Thorium-228	-5.1E-02	1	UI			0	GP								pCi/L
Thorium-230	-3.3E-02	1	UI			0	GP								pCi/L
Thorium-232	-3.3E-02	1	UI			0	GP								pCi/L
Tritium	3.7E+02	1		■		2	GP	2.7E+02	1		■		2	GP	pCi/mL
Uranium-233/234	2.0E-01	1				0	GP								pCi/L
Uranium-235	3.0E-02	1	UI			0	GP								pCi/L
Uranium-238	1.1E-01	1				0	GP								pCi/L
Total alpha emitters	3.1E-01														pCi/L
Total beta emitters	1.8E+01														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₁)
SAMPLE DATE	08/18/95		10/17/95			
FIELD DATA						
Parameter	3Q95	4Q95	Unit			
Water elevation	208.9	208.3	ft msl			
pH	3.6	3.8	pH			
Sp. conductance	1490	1157	µS/cm			
Water temperature	25.0	21.9	°C			
Alkalinity as CaCO ₃	0	0	mg/L			
Turbidity	3	2	NTU			
Volume purged	0.84	2.2	well volumes			
Sampling code	X					
Synchronous water level	208.9 (08/09/95)	208.8 (11/14/95)	ft msl			

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	4.5	1	J			0	GE								µg/L
Barium, total recoverable	520	1	V			0	GE								µg/L
Cadmium, total recoverable	7.1	1		■		2	GE	5.3	1		■		2	GE	µg/L
Chromium, total recoverable	1.9	1	J			0	GE								µg/L
Cobalt, total recoverable	280	1		■		2	GE								µg/L
Copper, total recoverable	92	1				0	GE								µg/L
Cyanide	<20	1	V			0	GE								µg/L
Lead, total recoverable	17	1	V	■		0	GE	10	1				0	GE	µg/L
Mercury, total recoverable	0.056	1	J			0	GE								µg/L
Nickel, total recoverable	76	1	V			1	GE								µg/L
Nitrate-nitrite as nitrogen	150,000	100		■		2	GE	140,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	180	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<0.50	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	0.55	1	J			0	GE								µg/L
Dichloromethane	<0.74	1	V			0	GE								µg/L
Phenols															
Tetrachloroethylene	<0.050	1				0	GE								µg/L
Trichloroethylene	20	1		■		2	GE								µg/L
Trichlorofluoromethane	0.70	1	V			0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 97C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	3.5E+01	1				2	GP								pCi/L
Cesium-137	-9.0E-02	1	UI			0	GP								pCi/L
Cobalt-60	2.6E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	2.8E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	8.2E+02	1		■		2	GP	5.0E+02	1		■		2	GP	pCi/L
Iodine-129	9.8E+01	1				2	GP								pCi/L
Nonvolatile beta	1.1E+03	1		■		2	GP	6.5E+02	1		■		2	GP	pCi/L
Plutonium-238	4.5E-01	1	UIV			0	GP								pCi/L
Plutonium-239/240	5.4E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	8.0E+01	1	V	■		2	GP								pCi/L
Radium-226	7.1E+01	1		■		2	GP								pCi/L
Radium-228	3.9E+01	1		■		2	GP								pCi/L
Strontium-90	5.0E+02	1	V	■		2	GP								pCi/L
Technetium-99	1.6E+02	1				0	GP								pCi/L
Thorium-228	1.8E+00	1	UIV			0	GP								pCi/L
Thorium-230	8.0E-02	1	UI			0	GP								pCi/L
Thorium-232	4.7E-02	1	UI			0	GP								pCi/L
Tritium	1.1E+04	1		■		2	GP	7.0E+03	1		■		2	GP	pCi/mL
Uranium-233/234	4.0E+02	1				2	GP								pCi/L
Uranium-235	3.1E+01	1				2	GP								pCi/L
Uranium-238	5.4E+02	1				2	GP								pCi/L
Total alpha emitters	1.0E+03			■											pCi/L
Total beta emitters	7.9E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/18/95 10/18/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	211.3	211.0	ft msl
pH	3.6	3.9	pH
Sp. conductance	1050	960	μS/cm
Water temperature	23.2	19.1	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	7	9	NTU
Volume purged	1.3	1.1	well volumes
Sampling code	X	X	
Synchronous water level	211.4 (08/09/95)	211.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<5.0	1				0	GE								μg/L
Barium, total recoverable	940	1	V			0	GE								μg/L
Cadmium, total recoverable	11	1		■		2	GE	8.2	1		■		2	GE	μg/L
Chromium, total recoverable	5.9	1				0	GE								μg/L
Cobalt, total recoverable	41	1				2	GE								μg/L
Copper, total recoverable	48	1				0	GE								μg/L
Cyanide	<20	1	V			0	GE								μg/L
Lead, total recoverable	42	1	V	■		1	GE	34	1		■		1	GE	μg/L
Mercury, total recoverable	<0.20	1	J			0	GE								μg/L
Nickel, total recoverable	34	1	V			0	GE								μg/L
Nitrate-nitrite as nitrogen	100,000	100		■		2	GE	140,000	100	V	■		2	GE	μg/L
Selenium, total recoverable	<5.0	1				0	GE								μg/L
Silver, total recoverable	<2.0	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	1.0	1	J			0	GE								μg/L
Zinc, total recoverable	110	1	V			0	GE								μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								μg/L
Dichloromethane	<2.0	1				0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 97D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	2.9E+01	1				2	GP								pCi/L
Cesium-137	1.8E+01	1				0	GP								pCi/L
Cobalt-60	5.6E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	3.0E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	1.0E+03	1		■		2	GP	1.0E+03	1		■		2	GP	pCi/L
Iodine-129	5.6E+01	1				2	GP								pCi/L
Nonvolatile beta	1.5E+03	1		■		2	GP	1.3E+03	1		■		2	GP	pCi/L
Plutonium-238	3.1E-01	1	UIV			0	GP								pCi/L
Plutonium-239/240	2.2E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	2.9E+01	1	V	■		2	GP								pCi/L
Radium-226	1.6E+01	1		■		1	GP								pCi/L
Radium-228	2.5E+01	1		■		2	GP								pCi/L
Strontium-90	7.1E+02	1	V	■		2	GP								pCi/L
Technetium-99	6.1E+01	1				0	GP								pCi/L
Thorium-228	2.1E+00	1	UIV			0	GP								pCi/L
Thorium-230	2.2E-01	1				0	GP								pCi/L
Thorium-232	6.3E-03	1	UI			0	GP								pCi/L
Tritium	5.8E+03	1		■		2	GP	5.4E+03	1		■		2	GP	pCi/mL
Uranium-233/234	2.1E+02	1				2	GP								pCi/L
Uranium-235	2.2E+01	1				2	GP								pCi/L
Uranium-238	5.0E+02	1				2	GP								pCi/L
Total alpha emitters	7.9E+02			■											pCi/L
Total beta emitters	8.8E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB 98AR

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

SAMPLE DATE 07/14/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	151.6	151.8	ft msl
pH	7.0	6.5	pH
Sp. conductance	150	156	µS/cm
Water temperature	21.1	20.1	°C
Alkalinity as CaCO ₃	50	54	mg/L
Turbidity	1	0	NTU
Volume purged	3.6	3.1	well volumes
Sampling code			
Synchronous water level	151.8 (08/09/95)	152.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	29	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.11	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	2,000	2				0	GE	2,300	2	V			0	GE	µg/L
Selenium, total recoverable	<5.0	1	V			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<20	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 98AR (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	9.1E-02	1				0	GP								pCi/L
Cesium-137	-1.1E+00	1	UI			0	GP								pCi/L
Cobalt-60	-5.4E-01	1	UI			0	GP								pCi/L
Curium-242	3.7E-02	1	UI			0	GP								pCi/L
Curium-243/244	1.7E-02	1	UI			0	GP								pCi/L
Curium-245/246	8.7E-03	1	UI			0	GP								pCi/L
Gross alpha	5.4E-01	1	UJI			0	GP	8.5E-01	1				0	GP	pCi/L
Iodine-129	-2.4E-01	1	UJI			0	GP								pCi/L
Nonvolatile beta	2.0E+00	1				0	GP	1.8E+00	1	UIV			0	GP	pCi/L
Plutonium-238	-5.2E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-9.4E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	8.0E-01	1	J			0	GP								pCi/L
Radium-226	4.0E-01	1				0	GP								pCi/L
Radium-228	-3.8E-01	1	UI			0	GP								pCi/L
Strontium-90	3.4E-01	1	UIV			0	GP								pCi/L
Technetium-99	-2.0E+00	1	UI			0	GP								pCi/L
Thorium-228	2.3E-02	1	UI			0	GP								pCi/L
Thorium-230	4.2E-02	1	UI			0	GP								pCi/L
Thorium-232	-9.0E-03	1	UI			0	GP								pCi/L
Tritium	3.1E+01	1		■		2	GP	3.5E+01	1		■		2	GP	pCi/mL
Uranium-233/234	1.6E-01	1	UI			0	GP								pCi/L
Uranium-235	-2.9E-02	1	UI			0	GP								pCi/L
Uranium-238	5.7E-02	1	UI			0	GP								pCi/L
Total alpha emitters	9.1E-02														pCi/L
Total beta emitters															pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 98C

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

SAMPLE DATE 08/14/95 10/17/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	209.7	209.4	ft msl
pH	3.0	3.4	pH
Sp. conductance	1070	1042	µS/cm
Water temperature	22.2	21.1	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	2.2	2.1	well volumes
Sampling code			
Synchronous water level	209.7 (08/09/95)	209.4 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	460	1	V			0	GE								µg/L
Cadmium, total recoverable	6.3	1	V	■		2	GE	6.6	1		■		2	GE	µg/L
Chromium, total recoverable	<4.0	1				0	GE								µg/L
Cobalt, total recoverable	320	1	V	■		2	GE								µg/L
Copper, total recoverable	70	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	4.0	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.15	1	JV			0	GE								µg/L
Nickel, total recoverable	44	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	140,000	200		■		2	GE	120,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	2.4	1	J			0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	2.5	1	J	■		2	GE								µg/L
Vanadium, total recoverable	0.37	1	J			0	GE								µg/L
Zinc, total recoverable	92	1				0	GE								µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 98C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	2.0E+01	1				2	GP								pCi/L
Cesium-137	-2.3E-01	1	UI			0	GP								pCi/L
Cobalt-60	2.8E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	1.5E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	8.8E+02	1		■		2	GP	9.4E+02	1		■		2	GP	pCi/L
Iodine-129	8.8E+01	1				2	GP								pCi/L
Nonvolatile beta	1.1E+03	1		■		2	GP	8.1E+02	1		■		2	GP	pCi/L
Plutonium-238	1.3E+01	1				2	GP								pCi/L
Plutonium-239/240	-1.5E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	7.4E+01	1		■		2	GP								pCi/L
Radium-226	5.4E+01	1		■		2	GP								pCi/L
Radium-228	1.1E+01	1		■		1	GP								pCi/L
Strontium-90	2.9E+02	1		■		2	GP								pCi/L
Technetium-99	1.0E+02	1				0	GP								pCi/L
Thorium-228	1.7E-01	1	UI			0	GP								pCi/L
Thorium-230	0.0E+00	1	UI			0	GP								pCi/L
Thorium-232	2.8E-02	1	UIV			0	GP								pCi/L
Tritium	6.7E+03	1		■		2	GP	6.1E+03	1		■		2	GP	pCi/mL
Uranium-233/234	3.8E+02	1				2	GP								pCi/L
Uranium-235	3.3E+01	1				2	GP								pCi/L
Uranium-238	5.3E+02	1				2	GP								pCi/L
Total alpha emitters	9.9E+02			■											pCi/L
Total beta emitters	4.8E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 98D

<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>
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 (IIB ₂)

SAMPLE DATE 10/17/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation		212.2	ft msl
pH		3.5	pH
Sp. conductance		925	µS/cm
Water temperature		23.0	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		78	NTU
Volume purged		2.6	well volumes
Sampling code			
Synchronous water level		212.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								17	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								44	1		■		1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen								100,000	100	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 98D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								5.2E+02	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta								1.1E+03	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								5.8E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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 07/17/95 10/04/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	150.9	151.0	ft msl
pH	6.6	6.3	pH
Sp. conductance	166	174	µS/cm
Water temperature	20.8	20.0	°C
Alkalinity as CaCO ₃	49	49	mg/L
Turbidity	1	0	NTU
Volume purged	3.1	4.1	well volumes
Sampling code			
Synchronous water level	150.9 (08/09/95)	151.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	1.5	1	J			0	GE								µg/L
Barium, total recoverable	30	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	7.2	1	J3			0	WA	µg/L
Mercury, total recoverable	<0.13	1	JV			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	5,200	4				1	GE	5,800	10				1	WA	µg/L
Selenium, total recoverable	<1.1	1	JV			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<10	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.8	1				0	GE								µg/L
Dichloromethane	<2.2	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 99A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	9.9E-02	1	UI			0	GP								pCi/L
Cesium-137	3.3E+00	1	UI			0	GP								pCi/L
Cobalt-60	1.7E+00	1	UI			0	GP								pCi/L
Curium-242	2.2E-01	1	UIV			0	GP								pCi/L
Curium-243/244	5.0E-03	1	UI			0	GP								pCi/L
Curium-245/246	3.0E-01	1	UIV			0	GP								pCi/L
Gross alpha	1.1E+00	1				0	GP	1.4E+00	1				0	TM	pCi/L
Iodine-129	1.1E+00	1	UI			0	GP								pCi/L
Nonvolatile beta	1.7E+00	1				0	GP	2.4E+00	1				0	TM	pCi/L
Plutonium-238	8.3E-03	1	UI			0	GP								pCi/L
Plutonium-239/240	3.1E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	7.0E-01	1	J			0	GP								pCi/L
Radium-226	3.5E-01	1				0	GP								pCi/L
Radium-228	-6.2E-01	1	UI			0	GP								pCi/L
Strontium-90	6.9E-02	1	UIV			0	GP								pCi/L
Technetium-99	-1.2E+01	1	UI			0	GP								pCi/L
Thorium-228	2.3E-02	1	UI			0	GP								pCi/L
Thorium-230	2.6E-02	1	UI			0	GP								pCi/L
Thorium-232	7.2E-03	1	UI			0	GP								pCi/L
Tritium	1.8E+02	1		■		2	GP	1.9E+02	1		■		2	TM	pCi/mL
Uranium-233/234	7.1E-02	1	UI			0	GP								pCi/L
Uranium-235	6.1E-03	1	UI			0	GP								pCi/L
Uranium-238	2.8E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 99C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N75683.7 E50320.6	33.275266 °N 81.681308 °W	167.2-157.2 ft msl	287.7 ft msl	4" PVC	S	Barnwell (IIB ₁)
SAMPLE DATE	07/17/95			10/04/95		
FIELD DATA						
<u>Parameter</u>	<u>3Q95</u>		<u>4Q95</u>			<u>Unit</u>
Water elevation	210.4		210.2			ft msl
pH	5.4		5.2			pH
Sp. conductance	266		267			µS/cm
Water temperature	20.0		19.4			°C
Alkalinity as CaCO ₃	2		2			mg/L
Turbidity	1		0			NTU
Volume purged	2.9		4.0			well volumes
Sampling code						
Synchronous water level	215.4 (08/09/95)		210.1 (11/14/95)			ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1	J3			0	GE								µg/L
Arsenic, total recoverable	<5.0	1	J3			0	GE								µg/L
Barium, total recoverable	63	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	1.9	1	J			0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	5.2	1	J			0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	3.0	1	J			0	GE	1.5	1	J			0	GE	µg/L
Mercury, total recoverable	<0.20	1	V			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	28,000	20		■		2	GE	28,000	50	V	■		2	GE	µg/L
Selenium, total recoverable	1.5	1	J			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	23	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<9.5	1				0	GE								µg/L
Dichloromethane	<1.8	1	JV			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	24	1		■		2	GE								µg/L
Trichlorofluoromethane	2.1	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 99C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	9.9E-02	1	UI			0	GP								pCi/L
Cesium-137	9.7E-02	1	UI			0	GP								pCi/L
Cobalt-60	9.8E-01	1	UI			0	GP								pCi/L
Curium-242	1.1E-01	1	UIV			0	GP								pCi/L
Curium-243/244	0.0E+00	1	UI			0	GP								pCi/L
Curium-245/246	5.5E-01	1	UIV			0	GP								pCi/L
Gross alpha	3.4E+01	1		■		2	GP	1.1E+01	1				1	GP	pCi/L
Iodine-129	6.4E+00	1				2	GP								pCi/L
Nonvolatile beta	8.4E+01	1	J	■		2	GP	1.1E+02	1		■		2	GP	pCi/L
Plutonium-238	-2.2E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-2.1E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	6.0E+00	1		■		0	GP								pCi/L
Radium-226	3.6E+00	1				0	GP								pCi/L
Radium-228	1.9E+00	1				0	GP								pCi/L
Strontium-90	4.4E+01	1	V	■		2	GP								pCi/L
Technetium-99	1.6E+01	1	UI			0	GP								pCi/L
Thorium-228	1.5E-03	1	UI			0	GP								pCi/L
Thorium-230	8.5E-02	1				0	GP								pCi/L
Thorium-232	1.7E-02	1	UI			0	GP								pCi/L
Tritium	1.2E+03	1	J	■		2	GP	1.2E+03	1		■		2	GP	pCi/mL
Uranium-233/234	9.1E+00	1				1	GP								pCi/L
Uranium-235	5.1E-01	1				0	GP								pCi/L
Uranium-238	8.6E+00	1				1	GP								pCi/L
Total alpha emitters	1.8E+01			■											pCi/L
Total beta emitters	5.2E+01			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 99D

<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>
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 (IIB ₂)

SAMPLE DATE 07/17/95 10/04/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	213.8	213.6	ft msl
pH	4.9	5.0	pH
Sp. conductance	32	34	μS/cm
Water temperature	20.6	21.1	°C
Alkalinity as CaCO ₃	1	1	mg/L
Turbidity	1	1	NTU
Volume purged	5.1	2.9	well volumes
Sampling code			
Synchronous water level	213.8 (08/09/95)	213.5 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<5.0	1				0	GE								μg/L
Barium, total recoverable	8.2	1	J			0	GE								μg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable	<25	1				0	GE								μg/L
Cobalt, total recoverable	<10	1				0	GE								μg/L
Copper, total recoverable	<25	1				0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	8.0	1				0	GE	8.3	1				0	GE	μg/L
Mercury, total recoverable	<0.059	1	JV			0	GE								μg/L
Nickel, total recoverable	<25	1				0	GE								μg/L
Nitrate-nitrite as nitrogen	1,800	2				0	GE	1,700	1				0	GE	μg/L
Selenium, total recoverable	<5.0	1	V			0	GE								μg/L
Silver, total recoverable	<25	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	15	1	JV			0	GE								μg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<9.6	1				0	GE								μg/L
Dichloromethane	<2.0	1	JV			0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB 99D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	1.6E-01	1				0	GP								pCi/L
Cesium-137	3.2E-01	1	UI			0	GP								pCi/L
Cobalt-60	6.5E-01	1	UI			0	GP								pCi/L
Curium-242	5.0E-01	1	UIV			0	GP								pCi/L
Curium-243/244	3.5E-01	1				0	GP								pCi/L
Curium-245/246	3.8E-01	1	UIV			0	GP								pCi/L
Gross alpha	1.6E+01	1		■		2	GP	1.1E+01	1				1	GP	pCi/L
Iodine-129	1.2E+00	1	UI			0	GP								pCi/L
Nonvolatile beta	1.7E+01	1				0	GP	1.4E+01	1				0	GP	pCi/L
Plutonium-238	-3.0E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	2.9E+00	1				0	GP								pCi/L
Radium, total alpha-emitting	9.0E-01	1	J			0	GP								pCi/L
Radium-226	4.2E-01	1				0	GP								pCi/L
Radium-228	-1.1E+00	1	UI			0	GP								pCi/L
Strontium-90	7.9E+00	1	V			1	GP								pCi/L
Technetium-99	-1.6E+01	1	UI			0	GP								pCi/L
Thorium-228	1.1E+00	1				0	GP								pCi/L
Thorium-230	3.6E-01	1				0	GP								pCi/L
Thorium-232	2.0E+00	1				0	GP								pCi/L
Tritium	1.9E+01	1				1	GP	1.9E+01	1				1	GP	pCi/mL
Uranium-233/234	3.2E+00	1				0	GP								pCi/L
Uranium-235	2.9E-01	1				0	GP								pCi/L
Uranium-238	8.8E+00	1				1	GP								pCi/L
Total alpha emitters	1.9E+01			■											pCi/L
Total beta emitters	7.9E+00														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 07/17/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	151.9	151.9	ft msl
pH	6.8	7.2	pH
Sp. conductance	184	188	μS/cm
Water temperature	20.5	19.7	°C
Alkalinity as CaCO ₃	44	50	mg/L
Turbidity	1	0	NTU
Volume purged	2.9	3.0	well volumes
Sampling code			
Synchronous water level	151.9 (08/10/95)	152.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<5.0	1				0	GE								μg/L
Barium, total recoverable	41	1				0	GE								μg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable	<25	1				0	GE								μg/L
Cobalt, total recoverable	<10	1				0	GE								μg/L
Copper, total recoverable	<25	1				0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	1.3	1	J			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable	<0.058	1	JV			0	GE								μg/L
Nickel, total recoverable	<25	1				0	GE								μg/L
Nitrate-nitrite as nitrogen	4,800	4				0	GE	4,700	10	V			0	GE	μg/L
Selenium, total recoverable	<5.0	1	V			0	GE								μg/L
Silver, total recoverable	<25	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	<11	1	JV			0	GE								μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<9.8	1				0	GE								μg/L
Dichloromethane	<1.9	1	JV			0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB100A (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	1.3E-01	1				0	GP								pCi/L
Cesium-137	1.2E+00	1	UI			0	GP								pCi/L
Cobalt-60	5.7E-01	1	UI			0	GP								pCi/L
Curium-242	3.1E-01	1	UIV			0	GP								pCi/L
Curium-243/244	6.2E-02	1	UI			0	GP								pCi/L
Curium-245/246	7.1E-01	1	UIV			0	GP								pCi/L
Gross alpha	1.4E+00	1				0	GP	1.2E+00	1				0	GP	pCi/L
Iodine-129	3.1E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	2.6E+00	1				0	GP	1.2E+00	1	UIV			0	GP	pCi/L
Plutonium-238	-8.7E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-1.7E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	6.0E-01	1	J			0	GP								pCi/L
Radium-226	5.7E-01	1				0	GP								pCi/L
Radium-228	-1.6E+00	1	UI			0	GP								pCi/L
Strontium-90	6.6E-01	1	UIV			0	GP								pCi/L
Technetium-99	-5.6E+00	1	UI			0	GP								pCi/L
Thorium-228	6.2E-02	1	UI			0	GP								pCi/L
Thorium-230	2.6E-02	1	UI			0	GP								pCi/L
Thorium-232	1.3E-02	1	UI			0	GP								pCi/L
Tritium	1.1E+02	1		■		2	GP	1.2E+02	1		■		2	GP	pCi/mL
Uranium-233/234	2.8E-01	1				0	GP								pCi/L
Uranium-235	5.0E-02	1				0	GP								pCi/L
Uranium-238	1.6E-01	1				0	GP								pCi/L
Total alpha emitters	6.2E-01														pCi/L
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 07/17/95 10/01/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	152.0	152.2	ft msl
pH	7.4	7.3	pH
Sp. conductance	161	161	µS/cm
Water temperature	20.1	19.5	°C
Alkalinity as CaCO ₃	53	61	mg/L
Turbidity	1	0	NTU
Volume purged	3.6	3.6	well volumes
Sampling code			
Synchronous water level	152.1 (08/10/95)	152.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	28	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.20	1	V			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	1,600	1				0	GE	1,500	1	V			0	GE	µg/L
Selenium, total recoverable	<1.4	1	JV			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<4.4	1	JV			0	GE								µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB102C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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+00	1				0	GP	2.0E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.7E+02	1	J	■		2	GP	3.8E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	7.8E+02	1		■		2	GP	7.8E+02	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB103C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74210.0 E49651.3	33.270915 °N 81.680207 °W	157.1-147.1 ft msl	242.4 ft msl	4" PVC	S	Barnwell (IIB ₁)

SAMPLE DATE 07/18/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	203.2	203.1	ft msl
pH	5.6	5.4	pH
Sp. conductance	229	244	μS/cm
Water temperature	20.6	20.5	°C
Alkalinity as CaCO ₃	7	6	mg/L
Turbidity	1	0	NTU
Volume purged	2.6	2.2	well volumes
Sampling code			
Synchronous water level	203.0 (08/10/95)	202.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<1.3	1	JV			0	GE								μg/L
Barium, total recoverable	35	1				0	GE								μg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable	<25	1				0	GE								μg/L
Cobalt, total recoverable	<10	1				0	GE								μg/L
Copper, total recoverable	14	1	J			0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	1.7	1	J			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable	<0.20	1	V			0	GE								μg/L
Nickel, total recoverable	<25	1				0	GE								μg/L
Nitrate-nitrite as nitrogen	21,000	40		■		2	GE	66,000	40		■		2	GE	μg/L
Selenium, total recoverable	<5.0	1	V			0	GE								μg/L
Silver, total recoverable	<25	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	79	1	V			0	GE								μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								μg/L
Dichloromethane	<2.0	1	V			0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB103C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	-7.3E-03	1	UI			0	GP								pCi/L
Cesium-137	9.6E-01	1	UI			0	GP								pCi/L
Cobalt-60	8.6E-01	1	UI			0	GP								pCi/L
Curium-242	6.3E-03	1	UI			0	GP								pCi/L
Curium-243/244	2.8E-02	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	1.8E+00	1				0	GP	9.5E-01	1				0	GP	pCi/L
Iodine-129	2.1E+00	1	UI			0	GP								pCi/L
Nonvolatile beta	9.7E+00	1	J			0	GP	6.0E+00	1				0	GP	pCi/L
Plutonium-238	7.2E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	2.7E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	3.0E-01	1	UI			0	GP								pCi/L
Radium-226	5.2E-01	1				0	GP								pCi/L
Radium-228	-7.3E-01	1	UJI			0	GP								pCi/L
Strontium-90	4.1E+00	1	UIV			0	GP								pCi/L
Technetium-99	3.7E+01	1				0	GP								pCi/L
Thorium-228	2.0E-02	1	UI			0	GP								pCi/L
Thorium-230	3.3E-02	1	UI			0	GP								pCi/L
Thorium-232	0.0E+00	1	UI			0	GP								pCi/L
Tritium	6.2E+02	1		■		2	GP	6.2E+02	1		■		2	GP	pCi/mL
Uranium-233/234	1.3E-01	1	UI			0	GP								pCi/L
Uranium-235	-4.1E-02	1	UI			0	GP								pCi/L
Uranium-238	1.4E-01	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters	3.7E+01														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB104C

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

SAMPLE DATE	07/13/95	10/03/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	201.6	201.5	ft msl
pH	4.8	4.7	pH
Sp. conductance	405	423	μS/cm
Water temperature	19.7	19.0	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	1	1	NTU
Volume purged	2.9	2.6	well volumes
Sampling code			
Synchronous water level	201.2 (08/10/95)	201.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	0.76	1	J			0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1	J			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	45,000	40		■		2	GE	51,000	40		■		2	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB104C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				0	GP	1.8E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.3E+01	1				0	GP	2.0E+01	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.1E+03	1		■		2	GP	1.3E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE	08/14/95	10/18/95
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FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	204.9	204.6	ft msl
pH			
Sp. conductance			
Water temperature			
Alkalinity as CaCO ₃			
Turbidity			
Volume purged			
Sampling code	P	P	
Synchronous water level	205.0 (08/10/95)	204.7 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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-nitrite as nitrogen															
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB104D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium															
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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	Barnwell (IIB ₁)

SAMPLE DATE 08/15/95 10/17/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	208.3	208.0	ft msl
pH	3.4	3.5	pH
Sp. conductance	1330	1395	µS/cm
Water temperature	20.9	20.3	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volume purged	2.1	2.2	well volumes
Sampling code			
Synchronous water level	208.3 (08/09/95)	208.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	3.9	1	J			0	GE								µg/L
Barium, total recoverable	450	1	V			0	GE								µg/L
Cadmium, total recoverable	14	1		■		2	GE	14	1		■		2	GE	µg/L
Chromium, total recoverable	<4.0	1				0	GE								µg/L
Cobalt, total recoverable	310	1		■		2	GE								µg/L
Copper, total recoverable	78	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1	V			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	1.4	1	V			1	GE								µg/L
Nickel, total recoverable	63	1	V			1	GE								µg/L
Nitrate-nitrite as nitrogen	300,000	400		■		2	GE	180,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	150	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	4.2	1				1	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB105C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	2.1E+01	1				2	GP								pCi/L
Cesium-137	-4.4E-01	1	UI			0	GP								pCi/L
Cobalt-60	2.0E+00	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	1.6E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	5.2E+02	1		■		2	GP	4.7E+02	1		■		2	GP	pCi/L
Iodine-129	8.6E+01	1				2	GP								pCi/L
Nonvolatile beta	1.2E+03	1		■		2	GP	1.1E+03	1		■		2	GP	pCi/L
Plutonium-238	4.7E+00	1				1	GP								pCi/L
Plutonium-239/240	-6.1E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	7.1E+01	1	V	■		2	GP								pCi/L
Radium-226	6.0E+01	1		■		2	GP								pCi/L
Radium-228	2.4E+01	1		■		2	GP								pCi/L
Strontium-90	4.5E+02	1		■		2	GP								pCi/L
Technetium-99	1.2E+02	1				0	GP								pCi/L
Thorium-228	2.0E-02	1	UI			0	GP								pCi/L
Thorium-230	1.1E-02	1	UI			0	GP								pCi/L
Thorium-232	-1.4E-02	1	UIV			0	GP								pCi/L
Tritium	8.7E+03	1		■		2	GP	8.9E+03	1		■		2	GP	pCi/mL
Uranium-233/234	2.3E+02	1				2	GP								pCi/L
Uranium-235	1.6E+01	1				2	GP								pCi/L
Uranium-238	2.3E+02	1				2	GP								pCi/L
Total alpha emitters	5.1E+02			■											pCi/L
Total beta emitters	6.8E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/15/95 10/11/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	211.2	210.9	ft msl
pH	3.4	3.4	pH
Sp. conductance	261	264	µS/cm
Water temperature	21.8	21.5	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	0	NTU
Volume purged	2.6	3.7	well volumes
Sampling code			
Synchronous water level	211.2 (08/09/95)	211.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	280	1				0	GE								µg/L
Cadmium, total recoverable	<0.25	1	JV			0	GE	0.13	1	J			0	GE	µg/L
Chromium, total recoverable	2.0	1	J			0	GE								µg/L
Cobalt, total recoverable	23	1	V			1	GE								µg/L
Copper, total recoverable	70	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	3.2	1	J			0	GE	1.7	1	J			0	GE	µg/L
Mercury, total recoverable	<0.14	1	JV			0	GE								µg/L
Nickel, total recoverable	36	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	20,000	10		■		2	GE	18,000	20	V	■		2	GE	µg/L
Selenium, total recoverable	1.9	1	J			0	GE								µg/L
Silver, total recoverable	22	1	J			0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	0.56	1	J			0	GE								µg/L
Zinc, total recoverable	14	1				0	GE								µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	2.0	1	J			0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB105DR (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	4.6E+00	1				1	GP								pCi/L
Cesium-137	9.8E+00	1				0	GP								pCi/L
Cobalt-60	4.2E-01	1	UI			0	GP								pCi/L
Curium-242															
Curium-243/244	4.4E+00	1				1	GP								pCi/L
Curium-245/246															
Gross alpha	3.1E+02	1		■		2	GP	2.7E+02	1		■		2	GP	pCi/L
Iodine-129	2.5E+01	1				2	GP								pCi/L
Nonvolatile beta	4.2E+02	1		■		2	GP	2.8E+02	1		■		2	GP	pCi/L
Plutonium-238	5.3E-01	1				0	GP								pCi/L
Plutonium-239/240	-1.2E-04	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	9.2E+00	1	JV	■		0	GP								pCi/L
Radium-226	9.7E+00	1		■		0	GP								pCi/L
Radium-228	2.4E+00	1				0	GP								pCi/L
Strontium-90	6.7E+01	1		■		2	GP								pCi/L
Technetium-99	6.2E+00	1	UI			0	GP								pCi/L
Thorium-228	1.9E-01	1				0	GP								pCi/L
Thorium-230	5.2E-02	1				0	GP								pCi/L
Thorium-232	4.2E-03	1	UI			0	GP								pCi/L
Tritium	3.2E+02	1		■		2	GP	3.2E+02	1		■		2	GP	pCi/mL
Uranium-233/234	2.5E+02	1	V			2	GP								pCi/L
Uranium-235	2.2E+01	1				2	GP								pCi/L
Uranium-238	6.2E+02	1	V			2	GP								pCi/L
Total alpha emitters	9.0E+02			■											pCi/L
Total beta emitters	1.0E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB106C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74190.1 E50851.3	33.272503 °N 81.677536 °W	166.0-156.0 ft msl	235.1 ft msl	4" PVC	V	Barnwell (IIB ₁)

SAMPLE DATE 08/11/95 10/18/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	201.3	201.1	ft msl
pH	5.5	5.1	pH
Sp. conductance	557	640	µS/cm
Water temperature	19.8	19.9	°C
Alkalinity as CaCO ₃	9	1	mg/L
Turbidity	16	14	NTU
Volume purged	2.3	3.6	well volumes
Sampling code			
Synchronous water level	201.4 (08/09/95)	201.4 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	17	1		■		2	GE	21	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	2.5	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	61,000	100		■		2	GE	79,000	80	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB106C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	6.2E+01	1		■		2	GP	1.9E+01	1	J	■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta	7.8E+02	1	J	■		2	GP	8.5E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.6E+03	1		■		2	GP	1.9E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB106D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74193.0 E50636.8	33.272485 °N 81.677580 °W	222.9-202.9 ft msl	234.9 ft msl	4" PVC	S	Water Table (IIB ₂)

SAMPLE DATE 07/19/95 10/04/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	206.6	206.2	ft msl
pH	6.3	5.5	pH
Sp. conductance	109	105	μS/cm
Water temperature	28.1	22.4	°C
Alkalinity as CaCO ₃	46	42	mg/L
Turbidity	11	16	NTU
Volume purged	0.41	0.94	well volumes
Sampling code	I		
Synchronous water level	209.3 (08/09/95)	205.9 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	3.1	1	J			1	GE								μg/L
Arsenic, total recoverable	<5.0	1	V			0	GE								μg/L
Barium, total recoverable	15	1	J			0	GE								μg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable	<25	1				0	GE								μg/L
Cobalt, total recoverable	<10	1				0	GE								μg/L
Copper, total recoverable	46	1				0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	80	1	J	■		2	GE	120	1		■		2	GE	μg/L
Mercury, total recoverable	<0.20	1	V			0	GE								μg/L
Nickel, total recoverable	21	1	J			0	GE								μg/L
Nitrate-nitrite as nitrogen	150	1				0	GE	180	1				0	GE	μg/L
Selenium, total recoverable	<5.0	1	V			0	GE								μg/L
Silver, total recoverable	<16	1	JV			0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	500	1	JV			0	GE								μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate															μg/L
Dichloromethane	1.1	1	J			0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB106D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	5.9E-01	1	UI			0	GP	-2.3E-01	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.9E+00	1	UJI			0	GP	2.0E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting	3.0E-01	1	UI			0	GP								pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.3E+01	1				1	GP	1.0E+01	1				1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₁)

SAMPLE DATE 07/17/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	211.4	211.1	ft msl
pH	6.2	6.5	pH
Sp. conductance	169	173	µS/cm
Water temperature	20.2	19.5	°C
Alkalinity as CaCO ₃	46	28	mg/L
Turbidity	3	3	NTU
Volume purged	2.7	3.0	well volumes
Sampling code			
Synchronous water level	211.3 (08/09/95)	211.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	33	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.17	1	J			0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	1.2	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.20	1	V			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	7,100	4				1	GE	6,500	10	V			1	GE	µg/L
Selenium, total recoverable	<5.0	1	J			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<11	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	1.4	1	J			0	GE								µg/L
Trichloroethylene	1.6	1	J			0	GE								µg/L
Trichlorofluoromethane	7.4	1				1	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB107C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	7.5E-02	1	UI			0	GP								pCi/L
Cesium-137	7.8E-02	1	UI			0	GP								pCi/L
Cobalt-60	-4.8E-01	1	UI			0	GP								pCi/L
Curium-242	2.7E-01	1	UIV			0	GP								pCi/L
Curium-243/244	-9.5E-03	1	UI			0	GP								pCi/L
Curium-245/246	4.0E-01	1	UIV			0	GP								pCi/L
Gross alpha	1.1E+00	1				0	GP	2.7E+00	1				0	GP	pCi/L
Iodine-129	6.4E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	4.1E+01	1				1	GP	3.3E+01	1	V			1	GP	pCi/L
Plutonium-238	0.0E+00	1	UI			0	GP								pCi/L
Plutonium-239/240	-4.2E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.0E+00	1	J			0	GP								pCi/L
Radium-226	3.8E-01	1				0	GP								pCi/L
Radium-228	-1.5E-03	1	UI			0	GP								pCi/L
Strontium-90	2.3E+01	1	V	■		2	GP								pCi/L
Technetium-99	-1.2E+01	1	UI			0	GP								pCi/L
Thorium-228	0.0E+00	1	UI			0	GP								pCi/L
Thorium-230	1.3E-01	1				0	GP								pCi/L
Thorium-232	-5.8E-03	1	UI			0	GP								pCi/L
Tritium	1.3E+02	1		■		2	GP	1.2E+02	1		■		2	GP	pCi/mL
Uranium-233/234	9.3E-02	1	UI			0	GP								pCi/L
Uranium-235	-6.2E-03	1	UI			0	GP								pCi/L
Uranium-238	3.1E-02	1	UI			0	GP								pCi/L
Total alpha emitters	1.3E-01														pCi/L
Total beta emitters	2.3E+01														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/15/95 10/18/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	214.7	214.4	ft msl
pH	3.4	3.6	pH
Sp. conductance	531	425	µS/cm
Water temperature	20.5	20.1	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	2.9	3.3	well volumes
Sampling code			
Synchronous water level	214.9 (08/09/95)	214.4 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	15	1				0	GE								µg/L
Barium, total recoverable	150	1	V			0	GE								µg/L
Cadmium, total recoverable	6.0	1	V	■		2	GE	3.7	1				1	GE	µg/L
Chromium, total recoverable	0.78	1	J			0	GE								µg/L
Cobalt, total recoverable	19	1	V			0	GE								µg/L
Copper, total recoverable	32	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	3.7	1	V	■		2	GE								µg/L
Nickel, total recoverable	14	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	51,000	100		■		2	GE	46,000	40	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	50	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	1.1	1	J			0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB107D (cont.)

Radioactive Constituents

WSRC-TR-95-0146-4
Unclassified

WELL FSB108D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.3E+00	1				0	GP	1.9E+00	1	J			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.7E+00	1	UJI			0	GP	1.0E+00	1	UJI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.2E+01	1				1	GP	1.1E+01	1				1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

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 (IIB ₂)

SAMPLE DATE 07/19/95 10/02/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	214.5	214.3	ft msl
pH	5.9	5.9	pH
Sp. conductance	40	58	µS/cm
Water temperature	24.6	20.4	°C
Alkalinity as CaCO ₃	15	18	mg/L
Turbidity	4	43	NTU
Volume purged	1.1	1.1	well volumes
Sampling code	X	X	
Synchronous water level	214.5 (08/09/95)	214.3 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	2.6	1	J			0	GE								µg/L
Arsenic, total recoverable	<5.0	1	V			0	GE								µg/L
Barium, total recoverable	8.2	1	J			0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	8.8	1	J			0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	6.0	1				0	GE	35	1		■		1	GE	µg/L
Mercury, total recoverable	<0.20	1	V			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	460	1				0	GE	670	1				0	GE	µg/L
Selenium, total recoverable	<5.0	1	V			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	75	1	V			0	GE								µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB109D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	0.0E+00	1	UI			0	GP								pCi/L
Cesium-137	4.0E-01	1	UI			0	GP								pCi/L
Cobalt-60	-1.9E-01	1	UI			0	GP								pCi/L
Curium-242	1.5E-03	1	UI			0	GP								pCi/L
Curium-243/244	-4.2E-03	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	2.6E+00	1				0	GP	6.9E-01	1	UJI			0	GP	pCi/L
Iodine-129	2.0E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	2.0E+00	1	J			0	GP	2.6E+00	1	J			0	GP	pCi/L
Plutonium-238	0.0E+00	1	UI			0	GP								pCi/L
Plutonium-239/240	-5.6E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	4.0E-01	1	UI			0	GP								pCi/L
Radium-226	2.5E-01	1				0	GP								pCi/L
Radium-228	-1.9E+00	1	UJI			0	GP								pCi/L
Strontium-90	1.7E+00	1	UIV			0	GP								pCi/L
Technetium-99	-9.7E+00	1	UI			0	GP								pCi/L
Thorium-228	5.0E-03	1	UI			0	GP								pCi/L
Thorium-230	-1.1E-02	1	UI			0	GP								pCi/L
Thorium-232	0.0E+00	1	UI			0	GP								pCi/L
Tritium	2.8E+01	1		■		2	GP	2.3E+01	1		■		2	GP	pCi/mL
Uranium-233/234	5.3E-02	1	UI			0	GP								pCi/L
Uranium-235	0.0E+00	1	UI			0	GP								pCi/L
Uranium-238	4.6E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB110C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74190.7 E50150.6	33.271687 °N 81.678855 °W	147.2-137.2 ft msl	234.5 ft msl	4" PVC	S	Barnwell (IIB ₁)

SAMPLE DATE	07/19/95	10/05/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	201.0	200.8	ft msl
pH	5.8	5.7	pH
Sp. conductance	444	512	µS/cm
Water temperature	21.0	20.1	°C
Alkalinity as CaCO ₃	10	9	mg/L
Turbidity	2	0	NTU
Volume purged	2.9	3.2	well volumes
Sampling code			
Synchronous water level	200.7 (08/09/95)	200.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	100	1				0	GE	110	1	V			0	GE	µg/L
Cadmium, total recoverable	<5.0	1				0	GE	1.2	1	J			0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.20	1				0	GE								µg/L
Nickel, total recoverable	11	1	J			0	GE	10	1				0	GE	µg/L
Nitrate-nitrite as nitrogen	56,000	40		■		2	GE	150,000	100	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<25	1				0	GE	<2.0	1				0	GE	µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	85	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB110C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	2.1E-02	1	UI			0	GP								pCi/L
Cesium-137	3.2E-01	1	UI			0	GP								pCi/L
Cobalt-60	7.2E-01	1	UI			0	GP								pCi/L
Curium-242	2.3E-02	1	UI			0	GP								pCi/L
Curium-243/244	8.0E-02	1	UI			0	GP								pCi/L
Curium-245/246	-4.9E-03	1	UI			0	GP								pCi/L
Gross alpha	2.5E+00	1				0	GP	1.6E+00	1				0	GP	pCi/L
Iodine-129	1.3E+01	1				2	GP								pCi/L
Nonvolatile beta	4.8E+01	1	J			1	GP	3.8E+01	1				1	GP	pCi/L
Plutonium-238	6.3E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	0.0E+00	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.6E+00	1				0	GP								pCi/L
Radium-226	1.3E+00	1				0	GP								pCi/L
Radium-228	-1.0E+00	1	UJI			0	GP								pCi/L
Strontium-90	1.1E+01	1	V	■		2	GP								pCi/L
Technetium-99	8.7E+01	1				0	GP								pCi/L
Thorium-228	-3.1E-03	1	UI			0	GP								pCi/L
Thorium-230	4.5E-02	1	UI			0	GP								pCi/L
Thorium-232	-1.4E-02	1	UI			0	GP								pCi/L
Tritium	1.6E+03	1		■		2	GP	1.3E+03	1		■		2	GP	pCi/mL
Uranium-233/234	5.2E-02	1	UI			0	GP								pCi/L
Uranium-235	1.7E-02	1	UI			0	GP								pCi/L
Uranium-238	2.6E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters	1.1E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE	08/15/95	10/18/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	205.7	205.4	ft msl
pH	3.0	3.2	pH
Sp. conductance	1840	2010	µS/cm
Water temperature	21.5	21.1	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volume purged	3.0	2.4	well volumes
Sampling code			
Synchronous water level	205.8 (08/09/95)	205.4 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	200	1	V			0	GE								µg/L
Cadmium, total recoverable	9.0	1		■		2	GE	8.8	1		■		2	GE	µg/L
Chromium, total recoverable	5.3	1				0	GE								µg/L
Cobalt, total recoverable	20	1				0	GE								µg/L
Copper, total recoverable	72	1				0	GE								µg/L
Cyanide	1.9	1	J			0	GE								µg/L
Lead, total recoverable	<5.0	1	V			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	0.47	1	V			0	GE								µg/L
Nickel, total recoverable	34	1	V			0	GE								µg/L
Nitrate-nitrite as nitrogen	170,000	100		■		2	GE	270,000	200	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	0.79	1	J			0	GE								µg/L
Zinc, total recoverable	140	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB110D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	5.7E+01	1				2	GP								pCi/L
Cesium-137	-1.7E+00	1	UI			0	GP								pCi/L
Cobalt-60	4.2E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	8.8E+01	1				2	GP								pCi/L
Curium-245/246															
Gross alpha	9.0E+02	1		■		2	GP	5.6E+02	1		■		2	GP	pCi/L
Iodine-129	2.1E+02	1				2	GP								pCi/L
Nonvolatile beta	1.6E+03	1		■		2	GP	9.8E+02	1		■		2	GP	pCi/L
Plutonium-238	1.0E+01	1				2	GP								pCi/L
Plutonium-239/240	2.0E-01	1				0	GP								pCi/L
Radium, total alpha-emitting	1.4E+01	1	V	■		1	GP								pCi/L
Radium-226	9.2E+00	1		■		0	GP								pCi/L
Radium-228	3.5E+01	1		■		2	GP								pCi/L
Strontium-90	1.4E+03	1		■		2	GP								pCi/L
Technetium-99	1.5E+02	1				0	GP								pCi/L
Thorium-228	3.0E-01	1				0	GP								pCi/L
Thorium-230	0.0E+00	1	UI			0	GP								pCi/L
Thorium-232	-8.3E-03	1	UIV			0	GP								pCi/L
Tritium	1.5E+04	1		■		2	GP	1.4E+04	1		■		2	GP	pCi/mL
Uranium-233/234	2.7E+02	1				2	GP								pCi/L
Uranium-235	3.6E+01	1				2	GP								pCi/L
Uranium-238	1.1E+03	1				2	GP								pCi/L
Total alpha emitters	1.5E+03			■											pCi/L
Total beta emitters	1.8E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB111C

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

SAMPLE DATE 07/18/95 10/02/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	213.0	212.5	ft msl
pH	5.5	5.4	pH
Sp. conductance	54	55	µS/cm
Water temperature	20.0	19.1	°C
Alkalinity as CaCO ₃	8	6	mg/L
Turbidity	1	0	NTU
Volume purged	3.2	4.2	well volumes
Sampling code			
Synchronous water level	212.8 (08/09/95)	212.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<4.7	1				0	WA	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	1,900	5				0	WA	1,900	1	V			0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB111C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	6.4E-01	1				0	GP	1.8E-01	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.2E+00	1	J1			0	TM	2.9E-01	1	UI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	6.1E+00	1	J			0	GP	5.9E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/18/95 10/02/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	216.5	216.1	ft msl
pH	4.9	4.8	pH
Sp. conductance	33	34	µS/cm
Water temperature	20.4	20.0	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	1	0	NTU
Volume purged	3.6	3.4	well volumes
Sampling code			
Synchronous water level	212.1 (08/09/95)	216.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	<5.0	1				0	GE								µg/L
Barium, total recoverable	11	1	J			0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	55	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	4.3	1	J			0	GE	3.1	1	J			0	GE	µg/L
Mercury, total recoverable	<0.20	1	V			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	1,300	1				0	GE	1,100	1				0	GE	µg/L
Selenium, total recoverable	<5.0	1	J			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	56	1				0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1	V			0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB111D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	2.9E-02	1	UI			0	GP								pCi/L
Cesium-137	1.0E-01	1	UI			0	GP								pCi/L
Cobalt-60	-4.1E-01	1	UI			0	GP								pCi/L
Curium-242	4.5E-01	1	UIV			0	GP								pCi/L
Curium-243/244	-4.0E-03	1	UI			0	GP								pCi/L
Curium-245/246	5.6E-01	1	UIV			0	GP								pCi/L
Gross alpha	1.8E+00	1				0	GP	1.1E+00	1	J			0	GP	pCi/L
Iodine-129	1.6E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	3.7E+00	1	J			0	GP	3.7E+00	1	J			0	GP	pCi/L
Plutonium-238	-1.8E-03	1	UI			0	GP								pCi/L
Plutonium-239/240	-1.3E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	9.0E-01	1				0	GP								pCi/L
Radium-226	4.7E-01	1				0	GP								pCi/L
Radium-228	-1.1E+00	1	UI			0	GP								pCi/L
Strontium-90	1.2E+00	1	UIV			0	GP								pCi/L
Technetium-99	-1.5E+01	1	UI			0	GP								pCi/L
Thorium-228	6.3E-01	1				0	GP								pCi/L
Thorium-230	1.2E-01	1				0	GP								pCi/L
Thorium-232	-9.5E-03	1	UI			0	GP								pCi/L
Tritium	9.3E+00	1	J			0	GP	1.0E+01	1				1	GP	pCi/mL
Uranium-233/234	3.5E-02	1	UI			0	GP								pCi/L
Uranium-235	2.6E-02	1	UI			0	GP								pCi/L
Uranium-238	4.9E-02	1	UI			0	GP								pCi/L
Total alpha emitters	7.5E-01														pCi/L
Total beta emitters															pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 07/21/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	153.6	153.6	ft msl
pH	6.7	6.3	pH
Sp. conductance	178	153	µS/cm
Water temperature	19.6	19.0	°C
Alkalinity as CaCO ₃	36	33	mg/L
Turbidity	1	0	NTU
Volume purged	3.5	3.2	well volumes
Sampling code			
Synchronous water level	153.6 (08/10/95)	153.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	1.7	1	JY			0	WA								µg/L
Barium, total recoverable	47	1	Y			0	WA								µg/L
Cadmium, total recoverable	<4.7	1	Y			0	WA	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<10	1	Y			0	WA								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<18	1	Y			0	WA								µg/L
Cyanide	<18	1	Y			0	WA								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.20	1				0	GE								µg/L
Nickel, total recoverable	1.5	1	JY			0	WA								µg/L
Nitrate-nitrite as nitrogen	2,300	5	Y			0	WA	4,400	2	V			0	GE	µg/L
Selenium, total recoverable	4.4	1	JY			0	WA								µg/L
Silver, total recoverable	0.47	1	JY			0	WA								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	<3.4	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<5.9	1	JVY			0	WA								µg/L
Dichloromethane	<1.6	1	JVY			0	WA								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB112A (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	6.3E-01	1	JV1			0	TM								pCi/L
Cesium-137	2.3E-02	1	UI			0	GP								pCi/L
Cobalt-60	-2.8E-01	1	UI			0	TM								pCi/L
Curium-242	0.0E+00	1	UI			0	GP								pCi/L
Curium-243/244	-4.8E-03	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	3.7E+00	1				0	TM	4.9E-01	1	UJI			0	GP	pCi/L
Iodine-129	6.5E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	1.4E+01	1				0	TM	8.5E+00	1	J			0	GP	pCi/L
Plutonium-238	0.0E+00	1	UI			0	GP								pCi/L
Plutonium-239/240	1.8E-01	1				0	GP								pCi/L
Radium, total alpha-emitting	9.0E-01	1				0	GP								pCi/L
Radium-226	7.3E-01	1				0	GP								pCi/L
Radium-228	-1.3E+00	1	UJI			0	GP								pCi/L
Strontium-90	1.5E+01	1	V	■		2	GP								pCi/L
Technetium-99	-4.3E+00	1	UI			0	GP								pCi/L
Thorium-228	-2.0E-02	1	UI			0	TM								pCi/L
Thorium-230	0.0E+00	1	UI			0	GP								pCi/L
Thorium-232	0.0E+00	1	UI			0	GP								pCi/L
Tritium	6.7E+01	1		■		2	GP	8.5E+01	1		■		2	GP	pCi/mL
Uranium-233/234	1.9E-02	1	UI			0	GP								pCi/L
Uranium-235	0.0E+00	1	UI			0	TM								pCi/L
Uranium-238	-3.0E-02	1	UI			0	TM								pCi/L
Total alpha emitters	8.1E-01														pCi/L
Total beta emitters	1.5E+01														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₁)

SAMPLE DATE 08/15/95 10/18/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	201.8	201.7	ft msl
pH	4.5	4.3	pH
Sp. conductance	1440	1595	µS/cm
Water temperature	20.6	19.6	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	7	3	NTU
Volume purged	2.5	2.6	well volumes
Sampling code			
Synchronous water level	202.0 (08/10/95)	201.7 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	3.7	1	J			0	GE								µg/L
Barium, total recoverable	760	1	V			0	GE								µg/L
Cadmium, total recoverable	37	1		■		2	GE	38	1		■		2	GE	µg/L
Chromium, total recoverable	<4.0	1				0	GE								µg/L
Cobalt, total recoverable	320	1		■		2	GE								µg/L
Copper, total recoverable	18	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1	V			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	0.38	1	V			0	GE								µg/L
Nickel, total recoverable	110	1	V	■		2	GE								µg/L
Nitrate-nitrite as nitrogen	150,000	100		■		2	GE	220,000	200	V	■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<2.0	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	210	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB112C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	-5.1E-03	1	UI			0	GP								pCi/L
Cesium-137	1.6E-01	1	UI			0	GP								pCi/L
Cobalt-60	4.6E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	-5.6E-02	1	UI			0	GP								pCi/L
Curium-245/246															
Gross alpha	2.3E+02	1		■		2	GP	6.4E+01	1		■		2	GP	pCi/L
Iodine-129	1.9E+02	1				2	GP								pCi/L
Nonvolatile beta	2.1E+03	1		■		2	GP	1.9E+03	1		■		2	GP	pCi/L
Plutonium-238	-2.5E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-1.4E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	8.2E+01	1	V	■		2	GP								pCi/L
Radium-226	1.1E+02	1		■		2	GP								pCi/L
Radium-228	3.1E+01	1		■		2	GP								pCi/L
Strontium-90	1.3E+03	1		■		2	GP								pCi/L
Technetium-99	3.6E+02	1				0	GP								pCi/L
Thorium-228	3.0E-01	1				0	GP								pCi/L
Thorium-230	4.3E-02	1	UI			0	GP								pCi/L
Thorium-232	-3.6E-03	1	UIV			0	GP								pCi/L
Tritium	7.4E+03	1		■		2	GP	7.8E+03	1		■		2	GP	pCi/mL
Uranium-233/234	2.8E+00	1				0	GP								pCi/L
Uranium-235	7.5E-02	1	UI			0	GP								pCi/L
Uranium-238	2.5E+00	1				0	GP								pCi/L
Total alpha emitters	5.5E+00														pCi/L
Total beta emitters	1.8E+03			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB112D

<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>
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 (IIB ₂)

SAMPLE DATE 08/15/95 10/18/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	206.0	205.7	ft msl
pH	3.5	3.6	pH
Sp. conductance	928	897	μS/cm
Water temperature	19.5	18.8	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	1	NTU
Volume purged	5.3	4.5	well volumes
Sampling code			
Synchronous water level	206.1 (08/10/95)	205.7 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<5.0	1				0	GE								μg/L
Barium, total recoverable	800	1	V			0	GE								μg/L
Cadmium, total recoverable	16	1		■		2	GE	15	1		■		2	GE	μg/L
Chromium, total recoverable	0.88	1	J			0	GE								μg/L
Cobalt, total recoverable	76	1		■		2	GE								μg/L
Copper, total recoverable	78	1				0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	<5.0	1	V			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable	<0.093	1	JV			0	GE								μg/L
Nickel, total recoverable	44	1	V			0	GE								μg/L
Nitrate-nitrite as nitrogen	77,000	100		■		2	GE	110,000	100	V	■		2	GE	μg/L
Selenium, total recoverable	<5.0	1				0	GE								μg/L
Silver, total recoverable	<2.0	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	90	1	V			0	GE								μg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<10	1	J1		●	0	GE								μg/L
Dichloromethane	<2.0	1				0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB112D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	1.2E-01	1	UI			0	GP								pCi/L
Cesium-137	2.9E-01	1	UI			0	GP								pCi/L
Cobalt-60	4.2E+00	1				0	GP								pCi/L
Curium-242															
Curium-243/244	4.4E-01	1				0	GP								pCi/L
Curium-245/246															
Gross alpha	1.4E+02	1		■		2	GP	1.2E+02	1		■		2	GP	pCi/L
Iodine-129	6.5E+01	1				2	GP								pCi/L
Nonvolatile beta	2.6E+03	1		■		2	GP	2.2E+03	1		■		2	GP	pCi/L
Plutonium-238	8.6E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	2.2E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	1.1E+02	1	V	■		2	GP								pCi/L
Radium-226	8.1E+01	1		■		2	GP								pCi/L
Radium-228	3.8E+01	1		■		2	GP								pCi/L
Strontium-90	5.5E+02	1		■		2	GP								pCi/L
Technetium-99	5.6E+01	1				0	GP								pCi/L
Thorium-228	-2.1E-02	1	UI			0	GP								pCi/L
Thorium-230	4.7E-02	1	UI			0	GP								pCi/L
Thorium-232	4.7E-02	1	UIV			0	GP								pCi/L
Tritium	6.6E+03	1		■		2	GP	5.8E+03	1		■		2	GP	pCi/mL
Uranium-233/234	1.5E+01	1				2	GP								pCi/L
Uranium-235	5.2E-01	1				0	GP								pCi/L
Uranium-238	1.1E+01	1				1	GP								pCi/L
Total alpha emitters	2.7E+01			■											pCi/L
Total beta emitters	7.1E+02			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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	07/19/95	10/03/95
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FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	159.5	159.5	ft msl
pH	11.9	12.1	pH
Sp. conductance	1330	1678	µS/cm
Water temperature	20.2	19.8	°C
Alkalinity as CaCO ₃	0	400	mg/L
Turbidity	5	1	NTU
Volume purged	0.80	0.84	well volumes
Sampling code	X	X	
Synchronous water level	158.9 (08/09/95)	159.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<50	10				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	7.0	1				0	GE	2.0	1	J			0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	5,900	4				1	GE	8,200	10				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>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB113A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				0	GP	1.7E+00	1	J			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	9.4E+00	1	J			0	GP	6.4E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.6E+02	1		■		2	GP	2.5E+02	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB113C

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

SAMPLE DATE 07/19/95 10/03/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	203.0	202.8	ft msl
pH	10.6	10.4	pH
Sp. conductance	182	181	µS/cm
Water temperature	21.0	19.3	°C
Alkalinity as CaCO ₃	0	52	mg/L
Turbidity	31	29	NTU
Volume purged	0.84	0.94	well volumes
Sampling code	X	X	
Synchronous water level	202.7 (08/09/95)	202.5 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable	66	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.18	1	J			0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	9.3	1				0	GE	10	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	4,800	4				0	GE	5,000	5				0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB113C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.1E+00	1				0	GP	2.8E+00	1	J			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.4E+00	1	J			0	GP	2.0E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	7.9E+01	1		■		2	GP	7.2E+01	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/19/95 10/02/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	207.9	207.6	ft msl
pH	4.7	4.7	pH
Sp. conductance	24	27	µS/cm
Water temperature	19.5	19.5	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	2	1	NTU
Volume purged	7.1	15	well volumes
Sampling code			
Synchronous water level	207.4 (08/09/95)	207.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<4.7	1				0	WA	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	740	1				0	WA	1,800	1				0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB113D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	2.9E+00	1				0	TM	7.8E-01	1	J			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	3.2E+00	1				0	TM	8.8E-01	1	UJI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	9.8E+00	1				0	TM	8.8E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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	07/18/95	10/02/95
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FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	155.8	155.9	ft msl
pH	7.8	6.7	pH
Sp. conductance	179	189	µS/cm
Water temperature	20.4	19.5	°C
Alkalinity as CaCO ₃	53	68	mg/L
Turbidity	3	5	NTU
Volume purged	3.6	3.6	well volumes
Sampling code			
Synchronous water level	155.7 (08/09/95)	155.9 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1	J			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	2,000	2				0	GE	2,000	2				0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB114A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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+00	1				0	GP	9.1E-01	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.6E+00	1				0	GP	1.2E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	8.4E-01	1				0	GP	7.8E-01	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB114C

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

SAMPLE DATE	07/18/95	10/02/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	214.0	213.7	ft msl
pH	5.5	5.6	pH
Sp. conductance	52	54	μS/cm
Water temperature	20.1	19.8	°C
Alkalinity as CaCO ₃	9	7	mg/L
Turbidity	2	1	NTU
Volume purged	3.3	2.5	well volumes
Sampling code			
Synchronous water level	213.8 (08/09/95)	213.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1	J			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	1,900	1				0	GE	2,100	2				0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB114C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	6.8E-02	1	UI			0	GP	1.0E+00	1	J			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	4.7E-01	1	UI			0	GP	1.8E+00	1	J			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	3.8E+00	1				0	GP	4.0E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/18/95 10/02/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	217.8	217.4	ft msl
pH	4.7	4.7	pH
Sp. conductance	39	45	μS/cm
Water temperature	20.0	18.6	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	1	NTU
Volume purged	6.8	12	well volumes
Sampling code			
Synchronous water level	217.7 (08/09/95)	217.3 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	2.4	1	J			0	GE	1.3	1	J			0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	1,500	1				0	GE	1,700	1				0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB114D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				0	GP	6.7E-01	1	UJI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.9E+00	1				0	GP	1.0E-01	1	UJI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	7.6E+00	1				0	GP	7.0E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB115C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72515.5 E49736.0	33.267306 °N 81.676692 °W	173.8-163.8 ft msl	207.8 ft msl	4" PVC	S	Barnwell (IIB ₁)

SAMPLE DATE 07/14/95 10/02/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	184.6	184.6	ft msl
pH	5.6	5.8	pH
Sp. conductance	40	21	µS/cm
Water temperature	19.0	19.7	°C
Alkalinity as CaCO ₃	2	2	mg/L
Turbidity	14	3	NTU
Volume purged	0.88	0.95	well volumes
Sampling code	X	X	
Synchronous water level	182.1 (08/10/95)	182.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	6.2	1	J			0	GE	2.4	1	J			0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	410	1				0	GE	470	1				0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB115C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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	UJI			0	GP	-2.8E-01	1	UJI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	3.8E-01	1	UI			0	GP	3.6E-01	1	UJI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	9.0E+00	1				0	GP	8.9E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/18/95 10/10/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	191.3	191.2	ft msl
pH	4.6	4.9	pH
Sp. conductance	53	13	μS/cm
Water temperature	27.1	22.7	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	44	39	NTU
Volume purged	0.70	0.53	well volumes
Sampling code	X	X	
Synchronous water level	191.5 (08/10/95)	191.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<2.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	25	1		■		0	GE	13	1				0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	70	1	J			0	GE	100	1	J			0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB115D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.6E+00	1				0	GP	8.2E-01	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.1E+00	1	UI			0	GP	6.0E-01	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	9.3E+00	1				0	GP	1.0E+01	1				1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB116C

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72725.5 E50645.9	33.269255 °N 81.674705 °W	170.5-160.5 ft msl	202.5 ft msl	4" PVC	S	Barnwell (IIB ₁)
SAMPLE DATE		07/13/95	10/02/95			
FIELD DATA						
<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>				<u>Unit</u>
Water elevation	189.7	189.6				ft msl
pH	4.8	5.0				pH
Sp. conductance	21	23				µS/cm
Water temperature	19.9	18.4				°C
Alkalinity as CaCO ₃	1	1				mg/L
Turbidity	1	0				NTU
Volume purged	4.4	3.3				well volumes
Sampling code						
Synchronous water level	189.6 (08/10/95)	189.6 (11/14/95)				ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable								4.9	1	V			0	GE	µg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.28	1	J			0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.7	1	V			0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable								<10	1				0	GE	µg/L
Nitrate-nitrite as nitrogen	790	1				0	GE	800	1				0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable								<2.0	1				0	GE	µg/L
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB116C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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			0	GP	5.5E-01	1	UJI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.0E-01	1	UI			0	GP	1.9E-02	1	UJI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.2E+01	1				1	GP	1.1E+01	1				1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/14/95 10/02/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	192.2	192.0	ft msl
pH	5.1	5.5	pH
Sp. conductance	128	30	µS/cm
Water temperature	23.0	21.5	°C
Alkalinity as CaCO ₃	1	3	mg/L
Turbidity	23	19	NTU
Volume purged	0.78	0.55	well volumes
Sampling code	X	X	
Synchronous water level	192.0 (08/10/95)	191.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	25	1	J	■		1	GE	17	1		■		0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	50	1	J			0	GE	50	1	J			0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB116D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	1.0E+00	1	J			0	GP	7.4E-01	1	J			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	6.2E-01	1	UI			0	GP	1.1E+00	1	UJI			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.2E+01	1				1	GP	1.1E+01	1				1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB117D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 (IIB ₂)

SAMPLE DATE 08/11/95 10/11/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	205.1	204.9	ft msl
pH	3.6	3.5	pH
Sp. conductance	388	411	μS/cm
Water temperature	19.1	18.8	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	8.3	11	well volumes
Sampling code			
Synchronous water level	205.1 (08/09/95)	204.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	2.4	1				0	GE	2.8	1				1	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1				0	GE	1.1	1	J			0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	35,000	40		■		2	GE	38,000	20	V	■		2	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB117D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	5.8E+02	1		■		2	GP	5.0E+02	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta	6.1E+02	1	J	■		2	GP	4.3E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	8.6E+02	1		■		2	GP	8.5E+02	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/19/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	212.3	211.9	ft msl
pH	4.9	4.7	pH
Sp. conductance	28	30	μS/cm
Water temperature	19.5	18.2	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	1	2	NTU
Volume purged	8.8	7.2	well volumes
Sampling code			
Synchronous water level	212.1 (08/09/95)	211.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	3.4	1	J			1	GE								μg/L
Arsenic, total recoverable	<5.0	1	V			0	GE								μg/L
Barium, total recoverable	8.5	1	J			0	GE								μg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable	<25	1				0	GE								μg/L
Cobalt, total recoverable	<10	1				0	GE								μg/L
Copper, total recoverable	19	1	J			0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	1.6	1	J			0	GE	2.6	1	J			0	GE	μg/L
Mercury, total recoverable	<0.20	1	V			0	GE								μg/L
Nickel, total recoverable	<25	1				0	GE								μg/L
Nitrate-nitrite as nitrogen	570	1				0	GE	2,100	1				0	GE	μg/L
Selenium, total recoverable	<5.0	1	V			0	GE								μg/L
Silver, total recoverable	<25	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	39	1	V			0	GE								μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								μg/L
Dichloromethane	<2.0	1				0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	2.9	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB118D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	7.2E-02	1	UI			0	GP								pCi/L
Cesium-137	-6.4E-02	1	UI			0	GP								pCi/L
Cobalt-60	3.0E-01	1	UI			0	GP								pCi/L
Curium-242	-4.2E-02	1	UI			0	GP								pCi/L
Curium-243/244	4.5E-02	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	1.5E+00	1				0	GP	8.4E-01	1				0	GP	pCi/L
Iodine-129	7.6E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	8.1E-01	1	UJI			0	GP	7.0E-01	1	UI			0	GP	pCi/L
Plutonium-238	9.4E-03	1	UI			0	GP								pCi/L
Plutonium-239/240	-8.5E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	6.0E-01	1				0	GP								pCi/L
Radium-226	7.2E-01	1				0	GP								pCi/L
Radium-228	-8.1E-01	1	UJI			0	GP								pCi/L
Strontium-90	2.0E+00	1	UIV			0	GP								pCi/L
Technetium-99	-3.3E+00	1	UI			0	GP								pCi/L
Thorium-228	7.3E-02	1	UI			0	GP								pCi/L
Thorium-230	-4.8E-02	1	UI			0	GP								pCi/L
Thorium-232	0.0E+00	1	UI			0	GP								pCi/L
Tritium	1.2E+01	1				1	GP	1.1E+01	1				1	GP	pCi/mL
Uranium-233/234	3.1E-02	1	UI			0	GP								pCi/L
Uranium-235	4.7E-02	1	UI			0	GP								pCi/L
Uranium-238	3.1E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 08/11/95 10/17/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	208.6	208.2	ft msl
pH	3.5	3.8	pH
Sp. conductance	790	459	µS/cm
Water temperature	20.0	17.6	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	229	87	NTU
Volume purged	1.1	0.91	well volumes
Sampling code	X	X	
Synchronous water level	208.6 (08/09/95)	208.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	6.2	1	V	■		2	GE	7.1	1		■		2	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	12	1				0	GE	40	1		■		1	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	100,000	100		■		2	GE	80,000	50	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB119D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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+03	1		■		2	GP	6.5E+02	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.2E+03	1		■		2	GP	6.1E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	4.2E+03	1		■		2	GP	4.7E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 07/20/95 10/04/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	148.5	148.9	ft msl
pH	9.7	11.6	pH
Sp. conductance	145	972	µS/cm
Water temperature	20.3	20.1	°C
Alkalinity as CaCO ₃	48	181	mg/L
Turbidity	2	1	NTU
Volume purged	3.6	2.3	well volumes
Sampling code			
Synchronous water level	148.6 (08/09/95)	148.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								µg/L
Arsenic, total recoverable	2.5	1	J			0	GE								µg/L
Barium, total recoverable	26	1				0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	<25	1				0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.20	1				0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	3,600	4				0	GE	13,000	10		■		2	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	5.9	1	J			0	GE								µg/L
Zinc, total recoverable	<8.3	1	JV			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	<2.0	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB120A (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	-4.9E-02	1	UI			0	GP								pCi/L
Cesium-137	3.6E-01	1	UI			0	GP								pCi/L
Cobalt-60	-7.9E-01	1	UI			0	GP								pCi/L
Curium-242	-4.7E-02	1	UI			0	GP								pCi/L
Curium-243/244	-1.3E-02	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	5.3E-01	1	UI			0	GP	6.1E-01	1				0	GP	pCi/L
Iodine-129	1.3E+00	1	UI			0	GP								pCi/L
Nonvolatile beta	3.9E+00	1	J			0	GP	1.2E+01	1				0	GP	pCi/L
Plutonium-238	1.8E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-1.5E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	-1.0E-01	1	UI			0	GP								pCi/L
Radium-226	4.8E-01	1				0	GP								pCi/L
Radium-228	-1.2E+00	1	UJI			0	GP								pCi/L
Strontium-90	3.0E+00	1	UIV			0	GP								pCi/L
Technetium-99	1.5E+01	1	UI			0	GP								pCi/L
Thorium-228	-7.1E-02	1	UI			0	GP								pCi/L
Thorium-230	-4.7E-02	1	UI			0	GP								pCi/L
Thorium-232	2.4E-02	1	UI			0	GP								pCi/L
Tritium	7.2E+01	1		■		2	GP	4.3E+02	1		■		2	GP	pCi/mL
Uranium-233/234	3.0E-01	1				0	GP								pCi/L
Uranium-235	-7.9E-03	1	UI			0	GP								pCi/L
Uranium-238	1.6E-01	1				0	GP								pCi/L
Total alpha emitters	4.6E-01														pCi/L
Total beta emitters															pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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	Barnwell (IIB ₁)

SAMPLE DATE 07/20/95 10/04/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	206.5	206.4	ft msl
pH	8.3	5.8	pH
Sp. conductance	331	332	μS/cm
Water temperature	20.1	19.5	°C
Alkalinity as CaCO ₃	10	10	mg/L
Turbidity	2	1	NTU
Volume purged	3.7	3.3	well volumes
Sampling code			
Synchronous water level	206.4 (08/09/95)	206.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<5.0	1				0	GE								μg/L
Barium, total recoverable	86	1				0	GE								μg/L
Cadmium, total recoverable	<5.0	1				0	GE	0.56	1	J			0	GE	μg/L
Chromium, total recoverable	<25	1				0	GE								μg/L
Cobalt, total recoverable	5.5	1	J			0	GE								μg/L
Copper, total recoverable	<25	1				0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	1.1	1	J			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable	<0.20	1				0	GE								μg/L
Nickel, total recoverable	<25	1				0	GE								μg/L
Nitrate-nitrite as nitrogen	36,000	40		■		2	GE	35,000	50	V	■		2	GE	μg/L
Selenium, total recoverable	<5.0	1				0	GE								μg/L
Silver, total recoverable	<25	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	23	1	V			0	GE								μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								μg/L
Dichloromethane	<2.0	1				0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB120C (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	3.4E-02	1	UI			0	GP								pCi/L
Cesium-137	9.7E-01	1	UI			0	GP								pCi/L
Cobalt-60	-3.3E-02	1	UI			0	GP								pCi/L
Curium-242	-3.1E-02	1	UI			0	GP								pCi/L
Curium-243/244	5.5E-02	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	1.6E+01	1	J	■		2	GP	5.4E+00	1				0	GP	pCi/L
Iodine-129	9.4E+00	1				2	GP								pCi/L
Nonvolatile beta	4.4E+01	1				1	GP	3.3E+01	1				1	GP	pCi/L
Plutonium-238	1.0E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	-8.4E-03	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	7.7E+00	1		■		0	GP								pCi/L
Radium-226	5.9E+00	1		■		0	GP								pCi/L
Radium-228	-1.0E+00	1	UJI			0	GP								pCi/L
Strontium-90	8.6E+00	1	V	■		2	GP								pCi/L
Technetium-99	5.3E+01	1				0	GP								pCi/L
Thorium-228	-1.5E-02	1	UI			0	GP								pCi/L
Thorium-230	0.0E+00	1	UI			0	GP								pCi/L
Thorium-232	0.0E+00	1	UI			0	GP								pCi/L
Tritium	1.0E+03	1		■		2	GP	9.9E+02	1		■		2	GP	pCi/mL
Uranium-233/234	2.2E-01	1				0	GP								pCi/L
Uranium-235	6.6E-03	1	UI			0	GP								pCi/L
Uranium-238	1.3E-01	1				0	GP								pCi/L
Total alpha emitters	3.6E-01														pCi/L
Total beta emitters	7.1E+01			■											pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSB120D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 (IIB ₂)

SAMPLE DATE 07/19/95 10/05/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	210.0	209.8	ft msl
pH	6.1	5.9	pH
Sp. conductance	79	56	µS/cm
Water temperature	26.1	20.3	°C
Alkalinity as CaCO ₃	11	18	mg/L
Turbidity	12	9	NTU
Volume purged	1.0	1.0	well volumes
Sampling code	X	X	
Synchronous water level	209.9 (08/09/95)	209.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	3.1	1	J			1	GE								µg/L
Arsenic, total recoverable	<5.0	1	V			0	GE								µg/L
Barium, total recoverable	18	1	J			0	GE								µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE								µg/L
Cobalt, total recoverable	<10	1				0	GE								µg/L
Copper, total recoverable	12	1	J			0	GE								µg/L
Cyanide	<20	1				0	GE								µg/L
Lead, total recoverable	5.6	1				0	GE	2.1	1	J			0	GE	µg/L
Mercury, total recoverable	<0.20	1	V			0	GE								µg/L
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	160	1				0	GE	1,100	1	V			0	GE	µg/L
Selenium, total recoverable	<1.5	1	JV			0	GE								µg/L
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable	<5.0	1				0	GE								µg/L
Vanadium, total recoverable	<10	1				0	GE								µg/L
Zinc, total recoverable	65	1	V			0	GE								µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								µg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								µg/L
Dichloromethane	2.5	1				0	GE								µg/L
Phenols	<10	1				0	GE								µg/L
Tetrachloroethylene	<2.0	1				0	GE								µg/L
Trichloroethylene	<2.0	1				0	GE								µg/L
Trichlorofluoromethane	<2.0	1				0	GE								µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB120D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	-1.6E-02	1	UI			0	GP								pCi/L
Cesium-137	-2.9E-01	1	UI			0	GP								pCi/L
Cobalt-60	-9.2E-01	1	UI			0	GP								pCi/L
Curium-242	-1.3E-02	1	UI			0	GP								pCi/L
Curium-243/244	-3.1E-02	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	1.8E+00	1				0	GP	4.5E-01	1	UI			0	GP	pCi/L
Iodine-129	7.8E-01	1	UI			0	GP								pCi/L
Nonvolatile beta	1.6E+00	1	UJI			0	GP	8.7E-01	1	UI			0	GP	pCi/L
Plutonium-238	1.4E-01	1	UI			0	GP								pCi/L
Plutonium-239/240	3.2E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	6.0E-01	1				0	GP								pCi/L
Radium-226	6.1E-01	1				0	GP								pCi/L
Radium-228	-1.2E+00	1	UJI			0	GP								pCi/L
Strontium-90	1.7E-01	1	UIV			0	GP								pCi/L
Technetium-99	-7.8E-01	1	UI			0	GP								pCi/L
Thorium-228	3.0E-02	1	UI			0	GP								pCi/L
Thorium-230	-1.4E-02	1	UI			0	GP								pCi/L
Thorium-232	-2.2E-02	1	UI			0	GP								pCi/L
Tritium	1.3E+01	1				1	GP	1.4E+01	1				1	GP	pCi/mL
Uranium-233/234	5.6E-03	1	UI			0	GP								pCi/L
Uranium-235	1.2E-02	1	UI			0	GP								pCi/L
Uranium-238	6.3E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB121C

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

SAMPLE DATE	07/20/95	10/04/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	204.7	204.5	ft msl
pH	5.8	5.5	pH
Sp. conductance	49	46	µS/cm
Water temperature	19.8	18.7	°C
Alkalinity as CaCO ₃	9	5	mg/L
Turbidity	1	1	NTU
Volume purged	3.1	4.1	well volumes
Sampling code			
Synchronous water level	204.6 (08/09/95)	204.3 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable	38	1				0	GE								µg/L
Cadmium, total recoverable	<4.7	1				0	WA	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable	<25	1				0	GE								µg/L
Nitrate-nitrite as nitrogen	1,800	5				0	WA	1,800	1				0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable	<25	1				0	GE								µg/L
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB121C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				0	TM	1.1E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	4.8E+00	1				0	TM	8.5E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	1.4E+02	1			■	2	GP	1.4E+02	1			■	2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/19/95 10/05/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation	207.5	207.3	ft msl
pH	5.0	5.5	pH
Sp. conductance	92	671	μS/cm
Water temperature	19.8	18.9	°C
Alkalinity as CaCO ₃	3	7	mg/L
Turbidity	15	14	NTU
Volume purged	0.94	0.96	well volumes
Sampling code	X	X	
Synchronous water level	207.5 (08/09/95)	207.1 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	0.30	1	J			0	GE	μg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	66	1		■		2	GE	8.0	1				0	GE	μg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	6,600	4				1	GE	2,600	4	V			0	GE	μg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB121DR (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.5E+01	1		■		2	GP	1.4E+01	1				1	GP	pCi/L
Iodine-129															
Nonvolatile beta	7.9E+01	1	J	■		2	GP	6.0E+01	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	6.8E+01	1		■		2	GP	2.9E+01	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB122C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N73881.8 E48195.0	33.267812 °N 81.683403 °W	170.0-160.0 ft msl	218 ft msl	4" PVC	S	Barnwell (IIB ₁)

SAMPLE DATE	07/20/95	10/04/95
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FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	200.0	200.0	ft msl
pH		4.3	pH
Sp. conductance		489	µS/cm
Water temperature		18.4	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		2	NTU
Volume purged		6.9	well volumes
Sampling code	P		
Synchronous water level	199.7 (08/10/95)	199.5 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								0.83	1	J			0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen								60,000	50	V	■		2	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB122C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								8.2E+00	1				1	GP	pCi/L
Iodine-129															
Nonvolatile beta								5.8E+01	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								1.6E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/20/95 10/04/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	203.7	204.0	ft msl
pH	4.7	4.7	pH
Sp. conductance	106	142	μS/cm
Water temperature	19.5	19.4	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	2	1	NTU
Volume purged	7.8	14	well volumes
Sampling code			
Synchronous water level	203.4 (08/10/95)	203.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE								μg/L
Arsenic, total recoverable	<5.0	1				0	GE								μg/L
Barium, total recoverable	38	1				0	GE								μg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	μg/L
Chromium, total recoverable	<25	1				0	GE								μg/L
Cobalt, total recoverable	<10	1				0	GE								μg/L
Copper, total recoverable	<25	1				0	GE								μg/L
Cyanide	<20	1				0	GE								μg/L
Lead, total recoverable	2.4	1	J			0	GE	<5.0	1				0	GE	μg/L
Mercury, total recoverable	<0.20	1				0	GE								μg/L
Nickel, total recoverable	<25	1				0	GE								μg/L
Nitrate-nitrite as nitrogen	9,700	10				1	GE	14,000	10	V	■		2	GE	μg/L
Selenium, total recoverable	<5.0	1				0	GE								μg/L
Silver, total recoverable	<25	1				0	GE								μg/L
Thallium, total recoverable	<5.0	1				0	GE								μg/L
Vanadium, total recoverable	<10	1				0	GE								μg/L
Zinc, total recoverable	<17	1	JV			0	GE								μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE								μg/L
Bis(2-ethylhexyl) phthalate	<10	1				0	GE								μg/L
Dichloromethane	<2.0	1				0	GE								μg/L
Phenols	<10	1				0	GE								μg/L
Tetrachloroethylene	<2.0	1				0	GE								μg/L
Trichloroethylene	<2.0	1				0	GE								μg/L
Trichlorofluoromethane	<2.0	1				0	GE								μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB122D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241	0.0E+00	1	UI			0	GP								pCi/L
Cesium-137	1.2E+00	1	UI			0	GP								pCi/L
Cobalt-60	1.3E+00	1	UI			0	GP								pCi/L
Curium-242	-8.6E-03	1	UI			0	GP								pCi/L
Curium-243/244	3.3E-02	1	UI			0	GP								pCi/L
Curium-245/246	0.0E+00	1	UI			0	GP								pCi/L
Gross alpha	2.8E+00	1	J			0	GP	2.1E+00	1				0	GP	pCi/L
Iodine-129	0.0E+00	1	UI			0	GP								pCi/L
Nonvolatile beta	1.1E+01	1				0	GP	1.5E+01	1				0	GP	pCi/L
Plutonium-238	4.4E-02	1	UI			0	GP								pCi/L
Plutonium-239/240	2.4E-02	1	UI			0	GP								pCi/L
Radium, total alpha-emitting	6.0E-01	1				0	GP								pCi/L
Radium-226	9.3E-01	1				0	GP								pCi/L
Radium-228	-7.6E-01	1	UJI			0	GP								pCi/L
Strontium-90	2.2E+00	1	UIV			0	GP								pCi/L
Technetium-99	3.1E+01	1				0	GP								pCi/L
Thorium-228	0.0E+00	1	UI			0	GP								pCi/L
Thorium-230	-1.4E-02	1	UI			0	GP								pCi/L
Thorium-232	-7.0E-03	1	UI			0	GP								pCi/L
Tritium	4.2E+02	1			■	2	GP	5.4E+02	1			■	2	GP	pCi/mL
Uranium-233/234	1.6E-01	1	UI			0	GP								pCi/L
Uranium-235	1.2E-01	1	UI			0	GP								pCi/L
Uranium-238	7.8E-02	1	UI			0	GP								pCi/L
Total alpha emitters															
Total beta emitters	3.1E+01														pCi/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB123C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N74566.7 E51750.5	33.275129 °N 81.675374 °W	165.3-155.3 ft msl	238.1 ft msl	4" PVC	S	Barnwell (IIB ₁)

SAMPLE DATE 07/20/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	210.8	210.6	ft msl
pH	5.4	5.5	pH
Sp. conductance	64	68	µS/cm
Water temperature	19.6	18.7	°C
Alkalinity as CaCO ₃	7	7	mg/L
Turbidity	1	0	NTU
Volume purged	1.3	3.1	well volumes
Sampling code			
Synchronous water level	210.6 (08/09/95)	210.4 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	3,000	2				0	GE	3,100	4	V			0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB123C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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-01	1	UI			0	GP	-5.4E-02	1	UI			0	GP	pCi/L
Iodine-129															
Nonvolatile beta	1.8E+00	1	UII			0	GP	1.3E+00	1	UIV			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	2.2E+00	1				0	GP	2.0E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 07/21/95 10/01/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	212.7	212.5	ft msl
pH	4.6	4.6	pH
Sp. conductance	42	42	µS/cm
Water temperature	19.6	18.4	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volume purged	7.5	7.4	well volumes
Sampling code			
Synchronous water level	212.3 (08/09/95)	212.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable	<0.88	1	JV3			0	WA	<2.0	1				0	GE	µg/L
Chromium, total recoverable															
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable	2.0	1	JY3			0	WA	<5.0	1				0	GE	µg/L
Mercury, total recoverable															
Nickel, total recoverable															
Nitrate-nitrite as nitrogen	2,000	5	Y			0	WA	2,000	2	V			0	GE	µg/L
Selenium, total recoverable															
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable															
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene															
Bis(2-ethylhexyl) phthalate															
Dichloromethane															
Phenols															
Tetrachloroethylene															
Trichloroethylene															
Trichlorofluoromethane															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSB123D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha	3.1E+00	1				0	TM	1.2E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.1E+00	1	J1			0	TM	9.8E-01	1	UIV			0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting															
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	9.6E+01	1		■		2	TM	8.5E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 1D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N79063.1 E52992.5	33.287100 °N 81.680840 °W	228.6-208.5 ft msl	310.8 ft msl	2" PVC	V	Water Table (IIB ₂)

SAMPLE DATE 10/19/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		224.2	ft msl
pH		4.8	pH
Sp. conductance		337	µS/cm
Water temperature		17.6	°C
Alkalinity as CaCO ₃		3	mg/L
Turbidity		10	NTU
Volume purged		0.78	well volumes
Sampling code		X	
Synchronous water level		223.9 (11/30/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								0.36	1	J			0	GE	µg/L
Chromium, total recoverable								22	1				0	GE	µg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								27	1		■		1	GE	µg/L
Mercury, total recoverable								<0.20	1				0	GE	µg/L
Nickel, total recoverable								20	1				0	GE	µg/L
Nitrate-nitrite as nitrogen								5,600	4	V			1	GE	µg/L
Selenium, total recoverable								<5.0	1				0	GE	µg/L
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable								1.7	1	J			0	GE	µg/L
Zinc, total recoverable								36	1	V			0	GE	µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								<2.0	1				0	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<1.2	1	JV			0	GE	µg/L
Phenols															
Tetrachloroethylene								<2.0	1				0	GE	µg/L
Trichloroethylene								2.6	1				1	GE	µg/L
Trichlorofluoromethane								7.1	1		■		1	GE	µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 1D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								3.4E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta								4.2E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								3.8E+00	1				0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								8.0E+01	1			■	2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

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 (IIB ₂)

SAMPLE DATE 10/19/95

FIELD DATA

<u>Parameter</u>	<u>3Q95</u>	<u>4Q95</u>	<u>Unit</u>
Water elevation		225.2	ft msl
pH		5.9	pH
Sp. conductance		177	µS/cm
Water temperature		17.3	°C
Alkalinity as CaCO ₃		15	mg/L
Turbidity		9	NTU
Volume purged		0.74	well volumes
Sampling code		X	
Synchronous water level		225.2 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable								21	1				0	GE	µg/L
Cadmium, total recoverable								0.38	1	J			0	GE	µg/L
Chromium, total recoverable								22	1				0	GE	µg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								76	1		■		2	GE	µg/L
Mercury, total recoverable								0.056	1	J			0	GE	µg/L
Nickel, total recoverable								16	1				0	GE	µg/L
Nitrate-nitrite as nitrogen								390	1	V			0	GE	µg/L
Selenium, total recoverable								<5.0	1				0	GE	µg/L
Silver, total recoverable								<2.0	1				0	GE	µg/L
Thallium, total recoverable															
Vanadium, total recoverable								7.2	1	J			0	GE	µg/L
Zinc, total recoverable								30	1	V			0	GE	µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Benzene								<2.0	1				0	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<2.0	1				0	GE	µg/L
Phenols															
Tetrachloroethylene								<2.0	1				0	GE	µg/L
Trichloroethylene								<2.0	1				0	GE	µg/L
Trichlorofluoromethane								1.1	1	J			0	GE	µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 2D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								7.8E-01	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta								1.6E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								4.0E-01	1				0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								1.2E+01	1				1	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 3D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N77785.2 E52485.2	33.283369 °N 81.679706 °W	226.0-205.9 ft msl	302 ft msl	2" PVC	V	Water Table (IIB ₂)

SAMPLE DATE 10/19/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		222.5	ft msl
pH		7.5	pH
Sp. conductance		362	μS/cm
Water temperature		18.1	°C
Alkalinity as CaCO ₃		148	mg/L
Turbidity		17	NTU
Volume purged		1.1	well volumes
Sampling code		X	
Synchronous water level		222.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								<2.0	1				0	GE	μg/L
Chromium, total recoverable								36	1				0	GE	μg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								12	1				0	GE	μg/L
Mercury, total recoverable								<0.20	1				0	GE	μg/L
Nickel, total recoverable								20	1				0	GE	μg/L
Nitrate-nitrite as nitrogen								1,000	1	V			0	GE	μg/L
Selenium, total recoverable								1.7	1	J			0	GE	μg/L
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable								20	1				0	GE	μg/L
Zinc, total recoverable								17	1	V			0	GE	μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								<2.0	1				0	GE	μg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<2.0	1	V			0	GE	μg/L
Phenols															
Tetrachloroethylene								<2.0	1				0	GE	μg/L
Trichloroethylene								1.2	1	J			0	GE	μg/L
Trichlorofluoromethane								9.8	1				1	GE	μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 3D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta								1.2E+01	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								3.2E+00	1				0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								5.9E+01	1				2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSL 4D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N77452.4 E52230.4	33.282294 °N 81.679717 °W	224.1-204.0 ft msl	294.1 ft msl	2" PVC	V	Water Table (IIB ₂)

SAMPLE DATE 10/19/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		217.1	ft msl
pH		6.1	pH
Sp. conductance		136	µS/cm
Water temperature		18.9	°C
Alkalinity as CaCO ₃		8	mg/L
Turbidity		7	NTU
Volume purged		0.47	well volumes
Sampling code		X	
Synchronous water level		217.3 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								0.11	1	J			0	GE	µg/L
Chromium, total recoverable								19	1				0	GE	µg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								75	1				2	GE	µg/L
Mercury, total recoverable								<0.20	1				0	GE	µg/L
Nickel, total recoverable								16	1				0	GE	µg/L
Nitrate-nitrite as nitrogen								2,200	1	V			0	GE	µg/L
Selenium, total recoverable								1.8	1	J			0	GE	µg/L
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable								0.86	1	J			0	GE	µg/L
Zinc, total recoverable								37	1	V			0	GE	µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								2.0	1	J			0	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<2.0	1				0	GE	µg/L
Phenols															
Tetrachloroethylene								<2.0	1				0	GE	µg/L
Trichloroethylene								<2.0	1				0	GE	µg/L
Trichlorofluoromethane								4.9	1				0	GE	µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 4D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				0	GP	pCi/L
Iodine-129															
Nonvolatile beta								5.3E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								2.0E-01	1	UI			0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								6.4E+00	1				0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

- = exceeded holding time.
- = exceeded groundwater protection standard.

WELL FSL 5D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N77047.7 E51903.3	33.280865 °N 81.679791 °W	223.7-203.5 ft msl	291.8 ft msl	2" PVC	V	Water Table (IIB ₂)

SAMPLE DATE 10/18/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		220.7	ft msl
pH		5.6	pH
Sp. conductance		175	µS/cm
Water temperature		23.6	°C
Alkalinity as CaCO ₃		12	mg/L
Turbidity		1	NTU
Volume purged		4.0	well volumes
Sampling code			
Synchronous water level		220.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								0.098	1	J			0	GE	µg/L
Chromium, total recoverable								1.0	1	J			0	GE	µg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								<5.0	1				0	GE	µg/L
Mercury, total recoverable								0.029	1	J			0	GE	µg/L
Nickel, total recoverable								2.4	1	J			0	GE	µg/L
Nitrate-nitrite as nitrogen								18,000	10	V	■		2	GE	µg/L
Selenium, total recoverable								<5.0	1				0	GE	µg/L
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable								<10	1				0	GE	µg/L
Zinc, total recoverable								<5.5	1	V			0	GE	µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								<2.0	1				0	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<2.0	1				0	GE	µg/L
Phenols															
Tetrachloroethylene								<2.0	1				0	GE	µg/L
Trichloroethylene								1.9	1	J			0	GE	µg/L
Trichlorofluoromethane								<2.0	1				0	GE	µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 5D (cont.)

Radioactive Constituents

Parameter	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>R</u>	<u>"W</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								4.9E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta								4.6E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								8.0E-01	1				0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								3.8E+02	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 6D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 (IIB ₂)

SAMPLE DATE 10/18/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		219.9	ft msl
pH		4.8	pH
Sp. conductance		142	μS/cm
Water temperature		22.9	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		1	NTU
Volume purged		4.4	well volumes
Sampling code			
Synchronous water level		220.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								<2.0	1				0	GE	μg/L
Chromium, total recoverable								1.1	1	J			0	GE	μg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								<5.0	1				0	GE	μg/L
Mercury, total recoverable								0.23	1				0	GE	μg/L
Nickel, total recoverable								1.8	1	J			0	GE	μg/L
Nitrate-nitrite as nitrogen								14,000	10	V	■		2	GE	μg/L
Selenium, total recoverable								1.6	1	J			0	GE	μg/L
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable								0.45	1	J			0	GE	μg/L
Zinc, total recoverable								<8.9	1	V			0	GE	μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								<2.0	1				0	GE	μg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<1.8	1	JV			0	GE	μg/L
Phenols															
Tetrachloroethylene								<2.0	1				0	GE	μg/L
Trichloroethylene								1.0	1	J			0	GE	μg/L
Trichlorofluoromethane								<2.0	1				0	GE	μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 6D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								2.9E+00	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta								7.8E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								1.5E+00	1				0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								2.8E+02	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 7D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N76327.8 E51485.6	33.278592 °N 81.679492 °W	219.6-199.5 ft msl	287.6 ft msl	2" PVC	V	Water Table (IIB ₂)

SAMPLE DATE 10/12/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		218.8	ft msl
pH		4.2	pH
Sp. conductance		627	μS/cm
Water temperature		20.0	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		12	NTU
Volume purged		0.32	well volumes
Sampling code		X	
Synchronous water level		218.8 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								3.0	1				1	GE	μg/L
Chromium, total recoverable								8.1	1				0	GE	μg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								13	1				0	GE	μg/L
Mercury, total recoverable								0.16	1	J			0	GE	μg/L
Nickel, total recoverable								10	1				0	GE	μg/L
Nitrate-nitrite as nitrogen								73,000	40	V	■		2	GE	μg/L
Selenium, total recoverable								<3.1	1	JV			0	GE	μg/L
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable								1.2	1	J			0	GE	μg/L
Zinc, total recoverable								12	1				0	GE	μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								<2.0	1	J		●	0	GE	μg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<2.0	1	J		●	0	GE	μg/L
Phenols															
Tetrachloroethylene								<2.0	1	J		●	0	GE	μg/L
Trichloroethylene								<2.0	1	J		●	0	GE	μg/L
Trichlorofluoromethane								<2.0	1	J		●	0	GE	μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 7D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>Unit</u>
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								4.4E+01	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta								2.0E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								3.9E+01	1		■		2	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								1.1E+03	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 8D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 (IIB ₂)

SAMPLE DATE 10/12/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		218.0	ft msl
pH		5.0	pH
Sp. conductance		71	μS/cm
Water temperature		21.1	°C
Alkalinity as CaCO ₃		1	mg/L
Turbidity		1	NTU
Volume purged		5.6	well volumes
Sampling code			
Synchronous water level		218.0 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable								15	1	V			0	GE	μg/L
Cadmium, total recoverable								0.28	1	J			0	GE	μg/L
Chromium, total recoverable								2.2	1	J			0	WA	μg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								49	1	V	■		1	WA	μg/L
Mercury, total recoverable								<0.082	1	JV			0	GE	μg/L
Nickel, total recoverable								4.8	1	J			0	WA	μg/L
Nitrate-nitrite as nitrogen								4,100	10				0	WA	μg/L
Selenium, total recoverable								<5.0	1				0	GE	μg/L
Silver, total recoverable								<2.0	1				0	GE	μg/L
Thallium, total recoverable															
Vanadium, total recoverable								0.59	1	J			0	GE	μg/L
Zinc, total recoverable								18	1				0	GE	μg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								45	1		■		2	GE	μg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								1.1	1	J			0	GE	μg/L
Phenols															
Tetrachloroethylene								<2.0	1				0	GE	μg/L
Trichloroethylene								45	1		■		2	GE	μg/L
Trichlorofluoromethane								3.7	1	J			0	WA	μg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 8D (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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				1	TM	pCi/L
Iodine-129															
Nonvolatile beta								9.7E+00	1				0	TM	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								2.9E+00	1				0	TM	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								2.7E+01	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 9D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N75768.4 E51543.9	33.277450 °N 81.678252 °W	221.5-201.4 ft msl	285.9 ft msl	2" PVC	V	Water Table (lib ₂)

SAMPLE DATE 10/12/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation		216.9	ft msl
pH		4.5	pH
Sp. conductance		123	µS/cm
Water temperature		20.8	°C
Alkalinity as CaCO ₃		0	mg/L
Turbidity		3	NTU
Volume purged		4.3	well volumes
Sampling code			
Synchronous water level		216.9 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable															
Arsenic, total recoverable															
Barium, total recoverable															
Cadmium, total recoverable								1.1	1	J			0	GE	µg/L
Chromium, total recoverable								14	1				0	GE	µg/L
Cobalt, total recoverable															
Copper, total recoverable															
Cyanide															
Lead, total recoverable								22	1		■		0	GE	µg/L
Mercury, total recoverable								1.1	1	V			1	GE	µg/L
Nickel, total recoverable								17	1				0	GE	µg/L
Nitrate-nitrite as nitrogen								43,000	20	V	■		2	GE	µg/L
Selenium, total recoverable								<5.0	1				0	GE	µg/L
Silver, total recoverable															
Thallium, total recoverable															
Vanadium, total recoverable								22	1				0	GE	µg/L
Zinc, total recoverable								44	1	V			0	GE	µg/L

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene								<2.0	1	J1		●	0	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane								<1.0	1	JV1		●	0	GE	µg/L
Phenols															
Tetrachloroethylene								<2.0	1	J1		●	0	GE	µg/L
Trichloroethylene								1.1	1	J1		●	0	GE	µg/L
Trichlorofluoromethane								7.1	1	J1	■	●	1	GE	µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL FSL 9D (cont.)

Radioactive Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Americium-241															
Cesium-137															
Cobalt-60															
Curium-242															
Curium-243/244															
Curium-245/246															
Gross alpha								4.0E+01	1		■		2	GP	pCi/L
Iodine-129															
Nonvolatile beta								1.1E+02	1		■		2	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting								2.5E+00	1				0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium								7.1E+02	1		■		2	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL HSB 85A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
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 07/05/95 10/03/95

FIELD DATA

Parameter	3Q95	4Q95	Unit
Water elevation	169.4	169.4	ft msl
pH	6.8	6.8	pH
Sp. conductance	184	184	µS/cm
Water temperature	20.2	19.9	°C
Alkalinity as CaCO ₃	53	71	mg/L
Turbidity	0	0	NTU
Volume purged	2.6	4.4	well volumes
Sampling code			
Synchronous water level	169.5 (08/09/95)	168.6 (11/14/95)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Antimony, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Arsenic, total recoverable	1.2	1	J			0	GE	<5.0	1				0	GE	µg/L
Barium, total recoverable	29	1				0	GE	29	1	V			0	GE	µg/L
Cadmium, total recoverable	<5.0	1				0	GE	<2.0	1				0	GE	µg/L
Chromium, total recoverable	<25	1				0	GE	0.92	1	J			0	GE	µg/L
Cobalt, total recoverable															
Copper, total recoverable	<25	1				0	GE	<4.0	1				0	GE	µg/L
Cyanide	<20	1	V			0	GE	<20	1				0	GE	µg/L
Lead, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Mercury, total recoverable	<0.018	1	JV			0	GE	<0.048	1	JV			0	GE	µg/L
Nickel, total recoverable	<25	1				0	GE	<10	1				0	GE	µg/L
Nitrate-nitrite as nitrogen	150	1				0	GE	<100	1				0	GE	µg/L
Selenium, total recoverable	<5.0	1				0	GE	<5.0	1				0	GE	µg/L
Silver, total recoverable	<25	1				0	GE	<2.0	1				0	GE	µg/L
Thallium, total recoverable															
Vanadium, total recoverable	<10	1				0	GE	0.31	1	J			0	GE	µg/L
Zinc, total recoverable															

Organic Constituents

Parameter	3Q95	DF	Mod	ST	H	Flag	Lab	4Q95	DF	Mod	ST	H	Flag	Lab	Unit
Benzene	<2.0	1				0	GE	<2.0	1				0	GE	µg/L
Bis(2-ethylhexyl) phthalate															
Dichloromethane	<2.0	1	V			0	GE	<2.0	1				0	GE	µg/L
Phenols	<10	1				0	GE	<10	1				0	GE	µg/L
Tetrachloroethylene	<2.0	1				0	GE	<2.0	1				0	GE	µg/L
Trichloroethylene	<2.0	1				0	GE	<2.0	1				0	GE	µg/L
Trichlorofluoromethane	<2.0	1				0	GE	<2.0	1				0	GE	µg/L

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

WELL HSB 85A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</u>	<u>Lab</u>	<u>4Q95</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Flag</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	UJI			0	GP	4.6E-01	1				0	GP	pCi/L
Iodine-129															
Nonvolatile beta	2.3E+00	1				0	GP	1.5E+00	1				0	GP	pCi/L
Plutonium-238															
Plutonium-239/240															
Radium, total alpha-emitting	4.0E-01	1				0	GP	6.0E-01	1	V			0	GP	pCi/L
Radium-226															
Radium-228															
Strontium-90															
Technetium-99															
Thorium-228															
Thorium-230															
Thorium-232															
Tritium	-4.0E-01	1	UI			0	GP	-4.9E-02	1	UI			0	GP	pCi/mL
Uranium-233/234															
Uranium-235															
Uranium-238															
Total alpha emitters															
Total beta emitters															

Note: See Appendix B for flagging criteria. Synchronous water levels are measured over a 3-5 day period.

● = exceeded holding time.

■ = exceeded groundwater protection standard.

Table D-4. Maximum Results for Appendix IX Constituents Not Currently Used to Determine Compliance

<u>Well</u>	<u>Constituent</u>	<u>3Q95^a Result (µg/L)</u>
FSB 91C	Acetone	16.4
	Beryllium	2.22
		2.13
	Bromomethane	0.17
	Carbon tetrachloride	0.12
	Chloroform	0.11
	Chloromethane	0.09
	Di-n-butyl phthalate	0.69
	2-Hexanone	9.17
	Methyl ethyl ketone	3.96
FSB 92D	Toluene	0.15
	Acetone	4.23
	Beryllium	2.36
	Chloroform	0.09
	Chloromethane	0.11
	1,1-Dichloroethylene	0.09
	trans-1,2-Dichloroethylene	0.09
	2-Hexanone	2.17
	Methyl ethyl ketone	4.18
	Methyl isobutyl ketone	1.69
	2,4,5-T	0.0305
	Toluene	0.08
FSB 94DR	Xylenes	0.14
	Acetone	6.87
	Benzyl alcohol	0.57
	Beryllium	1.36
	Chloroform	0.09
	Chloromethane	0.11
	1,1-Dichloroethylene	0.09
	trans-1,2-Dichloroethylene	0.08
	2-Hexanone	1.54
	Methyl ethyl ketone	6.92
	Methyl isobutyl ketone	1.22
FSB 95DR	Toluene	0.1
	Xylenes	0.09
	Acetone	8.61
	Beryllium	0.818
	Benzyl alcohol	0.74
	Carbon tetrachloride	0.04
	Chloroform	0.09
	Chloromethane	0.04
	1,1-Dichloroethylene	0.08
	trans-1,2-Dichloroethylene	0.08

<u>Well</u>	<u>Constituent</u>	3Q95 ^a <u>Result (µg/L)</u>
	Methyl ethyl ketone	13.7
	Methyl isobutyl ketone	0.46
	Toluene	0.11
	Xylenes	0.14
FSB 97A	Acetone	4.77
	Di-n-butyl phthalate	0.942
		0.721
	2-Hexanone	2.24
	Methyl ethyl ketone	0.93
FSB 97C	Acetone	7.38
	Beryllium	10.3
	Chloroform	0.13
	Chloromethane	0.1
	Di-n-butyl phthalate	0.64
	2,4-Dichlorophenoxyacetic acid	0.0528
	Methyl ethyl ketone	0.76
	Toluene	0.07

Note: The concentrations reported third quarter 1995 exceeded the sample quantitation limits for the constituents listed.

^a Sample dates were 7/20/95 through 8/18/95.

Appendix E

Data Quality/Usability Assessment

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Data Quality/Usability Assessment

Quality assurance/quality control (QA/QC) procedures relating to accuracy and precision of analyses performed on groundwater samples are followed in the field and laboratory and are reviewed prior to publication of results. The review by the Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) of the volume of analytical data acquired each quarter and presented in various reports is an ongoing process; EPD/EMS' review of the QA/QC data cannot be completed in time to meet the deadlines for the groundwater monitoring reports required by the Resource Conservation and Recovery Act and associated regulations. Other site and regulatory personnel can obtain further information on the data quality and usability in a variety of ways, including those described below.

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

Data Qualification

The contract laboratories continually assess their own accuracy and precision according to U.S. Environmental Protection Agency (EPA) guidelines. They submit sample- or batch-specific QA/QC information either at the same time as analytical results or in quarterly summaries. Properly defined and used modifiers (also referred to as qualifiers) can be a key component in assessing data usability. Modifiers designed by EPD/EMS and used by the primary laboratories are presented in Appendix D.

Assessment of Accuracy of the Data

Accuracy, or the nearness of the reported result to the true concentration of a constituent in a sample, can be assessed in several ways.

A laboratory's general accuracy can be judged by analysis of results obtained from known samples. The non-radionuclide contract laboratories analyze commercial reference samples every quarter at EPD/EMS' request. The results of these analyses are presented in the EPD/EMS groundwater monitoring quarterly reports. The primary laboratories also seek or maintain state certification by participating periodically in performance studies; reference samples and analysis of results are provided by EPA. Results of these studies also are published in the EPD/EMS quarterly reports.

Analysis of blanks provides a tool for assessing the accuracy of both sampling and laboratory analysis. Results for all field blanks for the quarter can be found in the EPD/EMS quarterly reports. Any field or laboratory blanks that exceed established minimums are identified in the same reports, in tables associating them with groundwater samples analyzed in the same batches. In these regulatory reports, the modifier V is assigned to every result that is run in the same batch as a laboratory blank with positive results for that analyte. A second V qualifier is added if the analyte concentration is less than five times the concentration in the blank (or for common laboratory contaminants less than ten times).

Surrogates, organic compounds similar in chemical behavior to the compounds of interest but not normally found in environmental samples, are used to monitor the effect of the matrix on the accuracy of analyses for organic parameters. For example, for analyses of volatile organics by EPA Method 8240, three surrogate compounds are added to all samples and blanks in each analytical batch. In analyses of semivolatile organics, three acid compounds and three base/neutral compounds are used. Two surrogates are used in organochlorine pesticides analyses. Percent recoveries for surrogate analyses are calculated by laboratory personnel, reported to EPD/EMS, reviewed, and entered into the database, but they are not published. If recoveries are not within specified limits, the laboratory is expected to reanalyze the samples or attach qualifiers to the data identifying the anomalous results.

Sample-specific accuracy for both organic and inorganic parameters can be assessed by examination of matrix spike/matrix spike duplicate results. A portion of the sample is analyzed unspiked to determine a baseline set of values. A second portion of the sample is spiked with known concentrations of compounds appropriate to the analyses being performed, typically five volatile organic compounds for volatile organics analyses, eleven semivolatile compounds for semivolatiles, six pesticide compounds for pesticides, all metals for metals analyses by SW-846 methods (EPA, 1986), and a known quantity of cyanide for cyanide analysis. The percentage of the spike compound that is recovered (i.e., measured in excess of the value obtained for the unspiked sample) is a direct measure of analytical accuracy. EPA requires matrix spike/matrix spike duplicates to be run at least once per 20 samples of similar matrix.

Matrix spike/matrix spike duplicate results are reported to EPD/EMS but are not published. For organic compounds, according to EPA guidelines, no action is taken on the basis of matrix spike/matrix spike duplicate data alone (i.e., no result modifiers are assigned solely on the basis of matrix spike results); however, the results can indicate if a laboratory is having a systematic problem in the analysis of one or more analytes.

In the case of inorganic compounds, such as metals, the matrix spike sample analysis provides information about the effect of each sample matrix on the digestion and measurement methodology. Data qualifiers assigned by the laboratories on the basis of the percentage of spike recovery are reported in the EPD/EMS results tables.

Assessment of Precision

Precision of the analyses, or agreement of a set of replicate results among themselves, is assessed through the use of duplicates initiated by the laboratory and blind replicates provided by EPD/EMS. The results of duplicate and replicate analyses are presented in results tables that report only one quarter of data, usually during first, second, and third quarters. Duplicate and replicate results are not presented in results tables that report more than one quarter of data, generally provided in fourth quarter reports. In this case, the results tables instead present only the highest result for each analyte for each quarter of the year.

The laboratories assess precision by calculating the relative percent difference (RPD) for each pair of laboratory-initiated duplicate results. The contract laboratories use a data qualifier for metals analyses when the RPD for laboratory duplicates is greater than 20 percent. This qualifier is published in the EPD/EMS quarterly reports.

Additional statistical comparisons of laboratory duplicate and blind replicate results, both intra- and interlaboratory, are presented in the EPD/EMS quarterly reports. The calculation used for these reports is the mean relative difference (MRD), which is similar to EPA's RPD except that the MRD is the average of all the RPD values from one laboratory for each compound

(intralaboratory MRD) or all the RPD values from all laboratories for each compound (interlaboratory MRD) during one quarter. Because detection limits may vary among samples, the MRD requires calculation of a reference detection limit, which is the detection limit at the 90th percentile of the array of limits in the population of all duplicate and replicate analyses for a given analyte during a particular quarter. The MRD is not method-specific.

Method-Specific Accuracy and Precision

The contract laboratories' EPA-approved laboratory procedures include QA/QC requirements as an integral part of the methods. Thus, knowledge of the method used in obtaining data is an important component of determining data usability. EPA has conducted extensive research and development on the methods approved for the analysis of water and wastewater. Information on the accuracy and precision of a method is available from EPA publications, as is full information on required QA/QC procedures. A listing of the methods used by the primary laboratories during fourth quarter 1993 is given below along with the source for the method description. Many, if not all, of these sources include presentations of representative accuracy and precision results. The quarterly SRS Groundwater Monitoring Program report provides the methods used by the laboratories during each quarter.

Methods Used by the Contract Laboratories

<u>Method</u>	<u>Used to Analyze</u>	<u>Source</u>
EPA120.1	Specific conductance	EPA EMSL, 1983
EPA150.1	pH	EPA EMSL, 1983
EPA160.1	Total dissolved solids	EPA EMSL, 1983
EPA160.2	Total dissolved solids, total suspended solids	EPA EMSL, 1983
EPA180.1	Turbidity	EPA EMSL, 1983
EPA200.7	Metals	EPA EMSL, 1983
EPA204.2	Antimony	EPA EMSL, 1983
EPA206.2	Arsenic	EPA EMSL, 1983
EPA239.2	Lead	EPA EMSL, 1983
EPA245.1	Mercury	EPA EMSL, 1983
EPA270.2	Selenium	EPA EMSL, 1983
EPA279.2	Thallium	EPA EMSL, 1983
EPA300.0	Chloride, nitrite, sulfate	EPA EMSL, 1991
EPA310.1	Alkalinity	EPA EMSL, 1983
EPA325.2	Chloride	EPA EMSL, 1983
EPA335.3	Cyanide	EPA EMSL, 1983
EPA340.2	Fluoride	EPA EMSL, 1983
EPA353.1	Nitrogen, nitrate-nitrite	EPA EMSL, 1983
EPA353.2	Nitrogen, nitrate, nitrite, or combined	EPA EMSL, 1983
EPA365.1	Phosphorus, all forms (reported as total phosphates)	EPA EMSL, 1983
EPA365.2	Phosphorus, all forms (reported as total phosphates)	EPA EMSL, 1983
EPA376.2	Sulfide	EPA EMSL, 1983
EPA413.1	Oil & grease	EPA EMSL, 1983
EPA415.1	Dissolved organic carbon, total inorganic carbon, total organic carbon	EPA EMSL, 1983
EPA418.1	Total petroleum hydrocarbons	EPA EMSL, 1983
EPA420.2	Phenols	EPA EMSL, 1983
EPA900.0	Gross alpha, nonvolatile beta	EPA EMSL, 1980
EPA900.1	Total alpha-emitting radium	EPA EMSL, 1980
EPA906.0	Tritium	EPA EMSL, 1980
EPA6010	Metals	EPA, 1986
EPA7041	Antimony	EPA, 1986

<u>Method</u>	<u>Used to Analyze</u>	<u>Source</u>
EPA7060	Arsenic	EPA, 1986
EPA7421	Lead	EPA, 1986
EPA7470	Mercury	EPA, 1986
EPA7740	Selenium	EPA, 1986
EPA7841	Thallium	EPA, 1986
EPA8010	Chlorinated volatile organics	EPA, 1986
EPA8080	Organochlorine pesticides and PCBs	EPA, 1986
EPA8150	Chlorinated herbicides	EPA, 1986
EPA8240	GCMS volatiles	EPA, 1986
EPA8270	GCMS semivolatiles	EPA, 1986
EPA8280	Dioxins and furans	EPA, 1986
EPA9012	Cyanide	EPA, 1986
EPA9020	Total organic halogens	EPA, 1986
EPA9020A	Total organic halogens	EPA, 1986
EPA9030	Sulfide	EPA, 1986
EPA9060	Dissolved organic carbon, total inorganic carbon, total organic carbon	EPA, 1986

An example of available method-specific QA/QC information is that for the analysis of metals by EPA Method 6010/200.7 (EPA, 1986/EPA EMSL, 1983). The primary laboratories, General Engineering Laboratories (GE) and Roy F. Weston, Inc. (Weston), use this inductively coupled plasma (ICP) atomic emission spectrometric method.

The following precision and accuracy data are based on the experience of seven laboratories that applied the ICP technique to acid-distilled water matrices that had been spiked with various metal concentrates. (Note: Not all seven laboratories analyzed all 14 elements.) The references give results for samples having three concentration ranges; the results here are for samples having the lowest values, similar to actual groundwater results for the Savannah River Site.

ICP Precision and Accuracy Data

<u>Element</u>	<u>True value ($\mu\text{g/L}$)</u>	<u>Mean reported value ($\mu\text{g/L}$)</u>	<u>Mean percent RSD^a</u>
Aluminum	60	62	33
Arsenic	22	19	23
Beryllium	20	20	9.8
Cadmium	2.5	2.9	16
Chromium	10	10	18
Cobalt	20	20	4.1
Copper	11	11	40
Iron	20	19	15
Lead	24	30	32
Manganese	15	15	6.7
Nickel	30	28	11
Selenium	6	8.5	42
Vanadium	70	69	2.9
Zinc	16	19	45

^a Relative standard deviation. In EPA (1986), the column heading is Mean Standard Deviation (%).

As another example, EPA Method 601/8010 (EPA, 1991/EPA, 1986) is used by both GE and Weston for analyses of halogenated volatile organics. In the presentation of the method in both references, the following table gives method-specific accuracy and precision as functions of concentration. Contract laboratories are expected to achieve or at least approach these limits.

Accuracy and Precision as Functions of Concentration for EPA Method 601/8010

Parameter	Accuracy as recovery, X'^a ($\mu\text{g/L}$)	Single analyst precision ($\mu\text{g/L}$) ^b	Overall precision ($\mu\text{g/L}$) ^c
Bromodichloromethane	1.12C–1.02 ^d	0.11 $\bar{X}$ +0.04 ^e	0.20 $\bar{X}$ +1.00
Bromoform	0.96C–2.05	0.12 $\bar{X}$ +0.58	0.21 $\bar{X}$ +2.41
Bromomethane	0.76C–1.27	0.28 $\bar{X}$ +0.27	0.36 $\bar{X}$ +0.94
Carbon tetrachloride	0.98C–1.04	0.15 $\bar{X}$ +0.38	0.20 $\bar{X}$ +0.39
Chlorobenzene	1.00C–1.23	0.15 $\bar{X}$ –0.02	0.18 $\bar{X}$ +1.21
Chloroethane	0.99C–1.53	0.14 $\bar{X}$ –0.13	0.17 $\bar{X}$ +0.63
2-Chloroethyl vinyl ether ^f	1.00C	0.20 $\bar{X}$	0.35 $\bar{X}$
Chloroform	0.93C–0.39	0.13 $\bar{X}$ +0.15	0.19 $\bar{X}$ –0.02
Chloromethane	0.77C+0.18	0.28 $\bar{X}$ –0.31	0.52 $\bar{X}$ +1.31
Dibromochloromethane	0.94C+2.72	0.11 $\bar{X}$ +1.10	0.24 $\bar{X}$ +1.68
1,2-Dichlorobenzene	0.93C+1.70	0.20 $\bar{X}$ +0.97	0.13 $\bar{X}$ +6.13
1,3-Dichlorobenzene	0.95C+0.43	0.14 $\bar{X}$ +2.33	0.26 $\bar{X}$ +2.34
1,4-Dichlorobenzene	0.93C–0.09	0.15 $\bar{X}$ +0.29	0.20 $\bar{X}$ +0.41
1,1-Dichloroethane	0.95C–1.08	0.09 $\bar{X}$ +0.17	0.14 $\bar{X}$ +0.94
1,2-Dichloroethane	1.04C–1.06	0.11 $\bar{X}$ +0.70	0.15 $\bar{X}$ +0.94
1,1-Dichloroethylene	0.98C–0.87	0.21 $\bar{X}$ –0.23	0.29 $\bar{X}$ –0.40
trans-1,2-Dichloroethylene	0.97C–0.16	0.11 $\bar{X}$ +1.46	0.17 $\bar{X}$ +1.46
Dichloromethane	0.91C–0.93	0.11 $\bar{X}$ +0.33	0.21 $\bar{X}$ +1.43
1,2-Dichloropropane ^f	1.00C	0.13 $\bar{X}$	0.23 $\bar{X}$
cis-1,3-Dichloropropene ^f	1.00C	0.18 $\bar{X}$	0.32 $\bar{X}$
trans-1,3-Dichloropropene ^f	1.00C	0.18 $\bar{X}$	0.32 $\bar{X}$
1,1,2,2-Tetrachloroethane	0.95C+0.19	0.14 $\bar{X}$ +2.41	0.23 $\bar{X}$ +2.79
Tetrachloroethylene	0.94C+0.06	0.14 $\bar{X}$ +0.38	0.18 $\bar{X}$ +2.21
1,1,1-Trichloroethane	0.90C–0.16	0.15 $\bar{X}$ +0.04	0.20 $\bar{X}$ +0.37
1,1,2-Trichloroethane	0.86C+0.30	0.13 $\bar{X}$ –0.14	0.19 $\bar{X}$ +0.67
Trichloroethylene	0.87C+0.48	0.13 $\bar{X}$ –0.03	0.23 $\bar{X}$ +0.30
Trichlorofluoromethane	0.89C–0.07	0.15 $\bar{X}$ +0.67	0.26 $\bar{X}$ +0.91
Vinyl chloride	0.97C–0.36	0.13 $\bar{X}$ +0.65	0.27 $\bar{X}$ +0.40

^a X' = expected recovery for one or more measurements of a sample containing a concentration of C, in $\mu\text{g/L}$.

^b Expected single analyst standard deviation of measurements.

^c Expected interlaboratory standard deviation of measurements.

^d C = true value for the concentration, in $\mu\text{g/L}$.

^e $\bar{X}$ = average recovery found for measurements of samples containing a concentration of C, in $\mu\text{g/L}$.

^f Estimates based on performance of a single laboratory.

References Cited

EPA (U.S. Environmental Protection Agency), 1986. **Test Methods for Evaluating Solid Waste (SW-846)**, Volumes IA–IC. Washington, DC.

EPA (U.S. Environmental Protection Agency), 1991. *Guidelines Establishing Test Procedures for the Analysis of Pollutants*, **Code of Federal Regulations**, Title 40, Part 136, Appendix A. Washington, DC.

EPA EMSL (U.S. Environmental Protection Agency, Environmental Monitoring and Systems Laboratory), 1980. **Prescribed Procedures for Measurement of Radioactivity in Drinking Water**, EPA-600/4-80-032. Cincinnati, OH.

EPA EMSL (U.S. Environmental Protection Agency, Environmental Monitoring and Systems Laboratory), 1983. **Methods for Chemical Analysis of Water and Wastes**. Cincinnati, OH.

EPA EMSL (U.S. Environmental Protection Agency, Environmental Monitoring and Systems Laboratory), 1991. **Test Method, The Determination of Inorganic Anions in Water by Ion Chromatography—Method 300.0**. Cincinnati, OH.

Appendix F

Time Series Plots

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