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H-AREA HAZARDOUS WASTE MANAGEMENT FACILITY CORRECTIVE ACTION REPORT (U)

THIRD AND FOURTH QUARTER 1997

Volume I

Publication Date: March 1998

Authorized Derivative Classifier
and Reviewing Official:

UNCLASSIFIED
Does Not Contain Unclassified
Controlled Nuclear Information

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Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

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

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Key Words

**HSB and HSL wells
nitrate as nitrogen
nonvolatile beta
total beta emitters
tritium**

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Contents

Volume I	Page
List of Figures and Maps	iv
List of Tables	vii
Executive Summary	1
Semiannual Corrective Action Report	3
Introduction	3
System Evaluation	3
Water Quality and Elevation Data Tables (IIID.H.11.c.i)	3
Analytical Results	4
Appendix IX Analyses	4
Water Elevations	4
Hydrographs (IIID.H.11.c.ii)	5
Time vs. Concentration Plots (IIID.H.11.c.iii)	5
Isoconcentration Maps (IIID.H.11.c.iv)	5
Potentiometric Maps (IIID.H.11.c.v)	5
Potentiometric Cross Sections (IIID.H.11.c.vi)	5
Groundwater Flow Rate and Direction (IIID.H.11.c.vii)	6
Extent and Severity of Groundwater Contamination (IIID.H.11.c.viii)	6
Sum of Beta Dose	7
Background Results	7
Statistical Evaluation of Water-Quality and Water-Elevation Data (IIID.H.11.c.ix)	7
Qualification and Treatment of Data	8
Shewhart-CUSUM Calculations	8
Plotting of Results	9
Evaluation of Water Quality and Water Elevation Data (IIID.H.11.c.x)	16
Volume and Rates of Groundwater Pumped (IIID.H.11.c.xi)	16
Volume and Rates of Treated Groundwater Injected (IIID.H.11.c.xii)	17
Rainfall and Recharge (IIID.H.11.c.xiii)	17
Summary of System Downtime (IIID.H.11.c.xiv)	17
Minor Modifications to the System (IIID.H.11.c.xv)	19
Effectiveness of the Corrective Action System (IIID.H.11.c.xvi)	19
Underground Injection Control (UIC) Sampling Results	19
Appendix A—Groundwater Protection Standard	A-1
Appendix B—Figures	B-1
Appendix C—Groundwater Monitoring Results Tables	C-1
Appendix D—Time Series Plots	D-1
Appendix E—Hydrographs	E-1
Appendix F—Shewhart-CUSUM Charts	F-1
Appendix G—UIC Sample Results	G-1
 Volume II	
Appendix H—General Separations Area Maps for the F- and H-Area Hazardous Waste Management Facilities Semiannual Corrective Action Reports	

List of Figures and Maps

Volume I

Appendix B—Figures

	Page
1. Location of the H-Area HWMF at the Savannah River Site	B-3
2. Location of the Groundwater Monitoring Wells at the H-Area HWMF.....	B-4
3. Location of Aquifer Zone IIB ₂ (Water Table) Groundwater Monitoring Wells at the H-Area HWMF.....	B-5
4. Location of Aquifer Zone IIB ₁ (Barnwell/McBean) Groundwater Monitoring Wells at the H-Area HWMF.....	B-6
5. Location of Aquifer Unit IIA (Congaree) Groundwater Monitoring Wells at the H-Area HWMF.....	B-7
6. Hydrogeologic Cross-Section Showing Potentiometric Surfaces at the H-Area HWMF, Fourth Quarter 1997	B-9
7. Hydrogeologic Cross-Section Showing Mercury Concentrations at the H-Area HWMF, Fourth Quarter 1997	B-9
8. Hydrogeologic Cross-Section Showing Nitrate Concentrations at the H-Area HWMF, Fourth Quarter 1997	B-10
9. Hydrogeologic Cross-Section Showing Tritium Activities at the H-Area HWMF, Third Quarter 1997.....	B-10
10. Hydrogeologic Cross-Section Showing Iodine-129 Activities at the H-Area HWMF, Third Quarter 1997.....	B-11
11. Hydrogeologic Cross-Section Showing Strontium-90 Activities at the H-Area HWMF, Third Quarter 1997.....	B-11
12. Hydrogeologic Cross-Section Showing Gross Alpha Activities at the H-Area HWMF, Fourth Quarter 1997	B-12
13. Hydrogeologic Cross-Section Showing Nonvolatile Beta Activities at the H-Area HWMF, Fourth Quarter 1997	B-12

Volume II

Appendix H—Maps

	Page
1. Cadmium Concentrations in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-3
2. Cadmium Concentrations in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-3
3. Cadmium Concentrations in Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-3

4. Gross Alpha Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-4
5. Gross Alpha Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-4
6. Gross Alpha Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-4
7. Iodine-129 Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Third Quarter 1997	H-5
8. Iodine-129 Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Third Quarter 1997	H-5
9. Iodine-129 Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Third Quarter 1997	H-5
10. Lead Concentrations in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-6
11. Lead Concentrations in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-6
12. Lead Concentrations in Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-6
13. Mercury Concentrations in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-7
14. Mercury Concentrations in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-7
15. Mercury Concentrations in Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-7
16. Nitrate Concentrations in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-8
17. Nitrate Concentrations in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-8
18. Nitrate Concentrations in Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-8
19. Nonvolatile Beta Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-9
20. Nonvolatile Beta Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-9
21. Nonvolatile Beta Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-9
22. Strontium-90 Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Third Quarter 1997	H-10
23. Strontium-90 Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Third Quarter 1997	H-10
24. Strontium-90 Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Third Quarter 1997	H-10
25. Technetium-99 Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Third Quarter 1997	H-11

26. Technetium-99 Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Third Quarter 1997	H-11
27. Technetium-99 Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Third Quarter 1997	H-11
28. Tritium Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-12
29. Tritium Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-12
30. Tritium Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-12
31. Uranium-233/234 Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Third Quarter 1997	H-13
32. Uranium-233/234 Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Third Quarter 1997	H-13
33. Uranium-233/234 Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Third Quarter 1997	H-13
34. Uranium-238 Activities in Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Third Quarter 1997	H-14
35. Uranium-238 Activities in Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Third Quarter 1997	H-14
36. Uranium-238 Activities in Aquifer Unit IIA (Congaree) at the General Separations Area, Third Quarter 1997	H-14
37. Potentiometric Surface Map of Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Third Quarter 1997	H-15
38. Potentiometric Surface Map of Aquifer Zone IIB ₂ (Water Table) at the General Separations Area, Fourth Quarter 1997	H-15
39. Potentiometric Surface Map of Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Third Quarter 1997	H-16
40. Potentiometric Surface Map of Aquifer Zone IIB ₁ (Barnwell/McBean) at the General Separations Area, Fourth Quarter 1997	H-16
41. Potentiometric Surface Map of Aquifer Unit IIA (Congaree) at the General Separations Area, Third Quarter 1997	H-17
42. Potentiometric Surface Map of Aquifer Unit IIA (Congaree) at the General Separations Area, Fourth Quarter 1997	H-17

List of Tables

In-text	Page
1. Average Water Elevations (ft msl) in the Hydrostratigraphic Units beneath the H-Area HWMF	5
2. Horizontal Groundwater Flow Rates (ft/year) in the Hydrostratigraphic Units beneath the H-Area HWMF	6
3. Minimum and Maximum Background Water-Level Values	10
4. Out-of-Range Water-Level Measurements	12
5. Volumes Pumped (gallons) During the Second Half of 1997	16
6. Volumes Injected (gallons) During the Second Half of 1997	17
7. Rainfall (in.) and Recharge (in.) During the Second Half of 1997	17
8. Operations Activities and Downtime During the Second Half of 1997	18
 Appendix A	 Page
A-1. Groundwater Protection Standard	A-3
A-2. UIC Limits	A-5
 Appendix C	
C-1. Groundwater Monitoring Results for Individual Wells	C-6

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Executive Summary

The groundwater in the uppermost aquifer beneath the H-Area Hazardous Waste Management Facility (HWMF), also known as the H-Area Seepage Basins, at the Savannah River Site (SRS) is monitored periodically for various hazardous and radioactive constituents as required by Module III, Section D, of the 1995 Resource Conservation and Recovery Act (RCRA) Renewal Permit (South Carolina Hazardous and Mixed Waste Permit SC1-890-008-989), effective October 5, 1995 (hereafter called the RCRA permit). Currently, the H-Area HWMF monitoring network consists of 130 wells of the HSB series and 8 wells of the HSL series screened in the three hydrostratigraphic units that make up the uppermost aquifer beneath the H-Area HWMF (Figures 2-5, Appendix B). This report presents the results of the required groundwater monitoring program as identified in Section IIID.H.11.c of the RCRA permit and Section C of the Underground Injection Control (UIC) permit application (hereafter referred to as the UIC application).

As shown in Table C-1, the following constituents exceeded the Groundwater Protection Standards (GWPS) in wells at the H-Area HWMF during the second half of 1997: bis(2-ethylhexyl) phthalate, cobalt, cyanide, gross alpha, lead, mercury, nitrate-nitrite (as N), nonvolatile beta, radium-226, radium-228, tetrachloroethylene, tin, total radium, tritium, vanadium, and the sums of both alpha- and beta-emitting radionuclides.

The following radionuclides exceeded the standard for either total alpha emitters or total beta emitters: carbon-14, cobalt-60, iodine-129, nickel-63, strontium-90, technetium-99, uranium-233/234, and uranium-238.

At least one constituent exceed GWPS in 55 (83%) of the 66 Water Table wells, 36 (69%) of the 52 Barnwell/McBean wells, and 5 (25%) of the 20 Congaree wells.

Tritium was the primary constituent detected above the GWPS; it was elevated in 88 (64%) of the wells. Mercury was the only metal that exceeded the GWPS in more than 10 wells, and no organic constituent exceeded the GWPS in more than three wells during the second half of 1997.

Isoconcentration maps included in Volume II of this report indicate both the concentration or activity and the extent of the contamination during the second half of 1997 in each of the three hydrostratigraphic units.

Tritium, the radionuclide most frequently above the GWPS at the H-Area HWMF, had a maximum activity of $1.0\text{E}+04$ pCi/mL in Aquifer Zone IIB₁ (Barnwell/McBean) well HSB 86C during third quarter 1997 and in Aquifer Zone IIB₂ (Water Table) well HSB 86D during fourth quarter 1997. Maximum activities for three key radionuclides occurred in Aquifer Zone IIB₂ (Water Table) wells during the third quarter: nonvolatile beta, $3.4\text{E}+03$ pCi/L in well HSB115D; iodine-129, $1.4\text{E}+02$ pCi/L in well HSB114D; strontium-90, $1.7\text{E}+03$ pCi/L in well HSB115D. The maximum activity for gross alpha, $1.5\text{E}+02$ pCi/L in HSB102D, occurred in the fourth quarter.

Nitrate-nitrite as nitrogen had a maximum concentration of 43,000 µg/L in Aquifer Zone IIB₁ (Barnwell/McBean) well HSB137C during third quarter 1997. Mercury had a maximum concentration of 5.6 µg/L in Aquifer Zone IIB₂ (Water Table) well HSB102D during third quarter.

Water-level maps indicate that the groundwater flow rates and directions at the H-Area HWMF have remained relatively constant since the basins ceased to be active in 1988. Groundwater flow in Aquifer Zone IIB₂ (Water Table) for third and fourth quarter 1997 was south or southwest and in Aquifer Zone IIB₁ (Barnwell/McBean), south toward Fourmile Branch. Flow in Aquifer Unit IIA (Congaree) was northwest toward Upper Three Runs Creek.

The estimated maximum groundwater flow rates during the second half of 1997 ranged from approximately 620 to 800 ft/year during third quarter and from 550 to 690 ft/year during fourth quarter in Aquifer Zone IIB₂ (Water Table). In Aquifer Zone IIB₁ (Barnwell/McBean), flow rate estimates ranged from 220 to 240 ft/year during third quarter and from 220 to 260 ft/year during

fourth quarter. The estimated flow rate in Aquifer Unit IIA (Congaree) was 340 ft/year for third quarter and 320 ft/year for fourth quarter 1997.

The H-Area Groundwater Remediation Wastewater Treatment Units (WTU) facility operating permit was received on July 8, 1997, and shakedown operations began immediately. The WTUs operated in a shakedown mode during the third and fourth quarter 1997. Full-scale operations are currently anticipated to commence in late summer 1998.

Semiannual Corrective Action Report

Introduction

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

The facility is described in the introduction to Module III, Section D, of the RCRA permit. The H-Area HWMF well network monitors three distinct hydrostratigraphic units in the uppermost aquifer beneath the facility. The hydrostratigraphy at the H-Area HWMF is described in RCRA permit Section IIID.H.2, and the groundwater monitoring system is described in IIID.H.4 and Appendix IIID-B. A detailed description of the uppermost aquifer is included in the RCRA Part B post-closure care RCRA permit renewal application for the H-Area HWMF submitted to SCDHEC in October 1995.

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

System Evaluation

The H-Area WTU operated in a shakedown mode during third and fourth quarter 1997. Approximately 1,185,600 gallons were treated and injected. Flow rates were limited due to ongoing system testing and limited injection well capacity. Full-scale operation was not initiated due to various problems with the WTU. SRS has initiated a significant effort to identify and correct the problems that have been encountered during shakedown operations. These efforts have included reviews of the treatment system by independent wastewater treatment experts and SRS personnel.

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

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

Water-quality and water-elevation data for all H-Area HWMF wells, during the second half of 1997, are presented in this report (Table C-1 of Appendix C). Table C-1 includes field parameters and also identifies modifiers that define laboratory accuracy and precision. Definitions of the abbreviations and the modifiers, as well as descriptions of holding times, data rounding, and data qualification practices are also provided in Appendix C. Constituents that exceeded either the GWPS or EPA-approved holding times are noted by symbols in columns headed ST and H, respectively.

During third quarter 1997, two wells could not be sampled: HSB142D because it was dry and HSB112D because the pump was inoperable.

Appendix IX Metals were not analyzed due to high turbidity at well HSB115D.

During fourth quarter 1997, well HSB142D was again dry. At wells HSB152D and HSL 7D, metals were not analyzed due to turbidity. Flowmeter problems occurred at wells HSB 83B and HSB121A.

Consequently, volume purged was estimated for these wells. The problems identified with these wells are being addressed through the SRS well maintenance program.

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

Variable-Speed Pumps	Single-Speed Pumps
HSB 67, 68, 69, 84A, 84D, 86C, 86D, 101D, 102D, 103D, 104D, 105D, 106D, 107D, 108D, 110D, 111D, 111E, 112D, 112E, 113D, 114C, 114D, 116C, 116D, 117C, 125D, and 136D HSL 1D, 2D, 3D, 4D, 5D, 6D, 7D, and 8D	All remaining HSB wells have single-speed pumps

Analytical Results

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

Data received from the laboratories for the following radionuclide analyses were rejected: results for cobalt-60 and nickel-63 for HSB106D due to low abundance of the isotope; results for thorium-230 and thorium-232 for well HSB109D due to tailing or spectral resolution problems; results for thorium-228, thorium-230, and thorium-232 for well HSB136D due to tailing or spectral resolution problems; results for iodine-129 due to low abundance of the isotope and thorium-230 due to tailing or spectral resolution problems for well HSB150D; results for iodine-129 for wells HSB109C, HSB111E, HSB112E, and HSL 3D due to low abundance of the isotope; results for thorium-230 for wells HSB105C and HSB118A due to low abundance of the isotope; and results for cobalt-60 in well HSB126D due to low abundance of the isotope.

Appendix IX Analyses

During third quarter 1997, Appendix IX analyses were performed as required by the RCRA renewal permit. The following constituents not already on the RCRA permit Groundwater Protection Standards list were reported above their detection limits in H-Area wells:

- Phorate in well HSB105D
- Chlordane and endosulfan I in HSB113D
- Chlordane in HSB114D

Confirmation sampling was performed during fourth quarter, and results from the laboratory are pending.

Water Elevations

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

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

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

Unit	1Q97	2Q97	3Q97	4Q97
Aquifer Zone IIB ₂ (Water Table)	226.29	225.51	227.97	224.69
Aquifer Zone IIB ₁ (Barnwell/McBean) ^a	216.90	217.18	216.32	216.86
Aquifer Unit IIA (Congaree)	171.37	171.28	171.23	170.78

^a The averages include water elevations from wells in the upper and lower portions of Aquifer Zone IIB₁ (Barnwell/McBean).

All three aquifer zones had relatively constant water levels during 1997. Aquifer Zones IIB₂ and IIA had their lowest levels during fourth quarter, while the middle aquifer zone, IIB₁, was lowest during third quarter. The overall annual variation in Aquifer Zone IIB₂ was 3.28 ft; in Aquifer Zone IIB₁, 0.86 ft; and in Aquifer Zone IIA, only 0.59 ft.

A consistent downward vertical head relationship exists between the hydrostratigraphic zones and units monitored at the H-Area HWMF. Flow potential is downward from Aquifer Zone IIB₂ (Water Table) to Aquifer Zone IIB₁ (Barnwell/McBean), although at several well clusters the head difference is very small, and downward from Aquifer Zone IIB₁ (Barnwell/McBean) to Aquifer Unit IIA (Congaree). These hydrostratigraphic zones have exhibited consistent head relationships since 1988. There are no wells screened in the lower portion of Aquifer Unit IIA (Congaree) to evaluate the head relationship in this unit.

Hydrographs (IIID.H.11.c.ii)

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

Time vs. Concentration Plots (IIID.H.11.c.iii)

Appendix D contains time series plots for mercury, nitrate (or nitrate/nitrite), gross alpha, iodine-129, nonvolatile beta, strontium-90, and tritium, for selected wells. These wells were selected to delineate the extent of the constituent distribution, to monitor the migration of the constituents, and to follow trends of constituents present at high levels. Constituents reported as below detection were not plotted.

Isoconcentration Maps (IIID.H.11.c.iv)

Isoconcentration maps for iodine-129 and strontium-90 in the three hydrostratigraphic units during third quarter 1997 and for mercury, nitrate, gross alpha, nonvolatile beta, and tritium during fourth quarter 1997 are presented in Volume II.

Potentiometric Maps (IIID.H.11.c.v)

Piezometric and potentiometric surface maps for the monitored water-bearing units during third and fourth quarter 1997 are located in Volume II. The maps illustrate groundwater flow patterns beneath the H-area HWMF for the third and fourth quarter 1997.

Potentiometric Cross Sections (IIID.H.11.c.vi)

Potentiometric cross-sections, required by RCRA permit Section IIID.H.11.c.vi, are located in Volume II.

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

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

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 value dh is the difference in head, and dl is the length of the flow path. Flow path length is calculated to the nearest 100 ft for path B of Aquifer Zone IIB₁ (Barnwell/ McBean) and to the nearest 50 ft for the remaining flow paths. Maximum flow rate per day is calculated and rounded to two significant digits, then multiplied by 365 and rounded to two significant digits to obtain the flow rate per year. Flow rate estimates vary depending upon the vertical gradient between wells, the size of the area under consideration, the number of data points, and the length and location of the flow path. Because these calculations are based on inferred or estimated parameters, flow rate estimates are accurate to an order of magnitude only.

Maximum horizontal flow rate estimates for the hydrostratigraphic units during third and fourth quarter 1997 are provided in the following table.

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

	Aquifer Zone IIB ₂ (Water Table)	Aquifer Zone IIB ₁ (Barnwell/McBean)	Aquifer Unit IIA (Congaree)
K _h (ft/day)	20–40	1.5–10	65
Effective porosity	20%	20%	20%
dh/dl	varies	varies	varies
Flow Rate (ft/yr) (3Q97)	620–800	220–240	340
Flow Rate (ft/yr) (4Q97)	550–690	220–260	320

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

During both third and fourth quarter 1997, flow in Aquifer Zones IIB₂ (Water Table) and IIB₁ (Barnwell/McBean) was south along both flow paths A and B toward Fourmile Branch. Flow in Aquifer Unit IIA (Congaree) was west or northwest toward Upper Three Runs Creek during both quarters.

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

Constituents that exceeded the GWPS (Table A-1, Appendix A) during third and fourth quarter 1997 in the H-Area HWMF wells are noted in Table C-1 (Appendix C).

As shown in Table C-1, 25 constituents exceeded the GWPS in wells at the H-Area HWMF: bis(2-ethylhexyl) phthalate, carbon-14, cobalt, cobalt-60, cyanide, gross alpha, iodine-129, lead, mercury, nickel-63, nitrate-nitrite (as N), nonvolatile beta, radium-226, radium-228, strontium-90, technetium-99, tetrachloroethylene, tin, total radium, tritium, uranium 233/234, uranium-238, vanadium, and the sums of both alpha- and beta-emitting radionuclides.

Of these, carbon-14, cobalt-60, iodine-129, nickel-63, strontium-90, technetium-99, uranium 233/234, and uranium-238 are included in the list because they individually exceeded the standard for either total alpha emitters or total beta emitters (15 pCi/L and 50 pCi/L, respectively).

The extent and severity of groundwater contamination is delineated by the contours above the GWPS on the isoconcentration maps (Volume II). Tritium is the most widespread contaminant and exceeds the GWPS in all three aquifers (Maps 28–30 in Appendix H). Elevated activities north of the basins are probably due to tritium sources in the burial grounds. The highest activities are downgradient of the basins in the Water Table and the Barnwell/McBean aquifer zones. Tritium is also present in the Water Table aquifer zone along the sewer line to the basins. Tritium is elevated in some Congaree wells near the western end of the basins.

Nitrate or nitrate-nitrite (as N) (Maps 16–18) is present in all the aquifer zones under and south of the basins. Gross alpha (Maps 4–6), uranium-234 (Maps 31–33), uranium-238 (Maps 34–36), and iodine-129 (Maps 7–9) are present in a few wells, mostly near the western end of the basins. Nonvolatile beta and strontium-90 (Maps 19–24) are present in the Water Table aquifer zone below and south of the basins. Nonvolatile beta is also present to a lesser extent in the Barnwell/McBean aquifer zone. Technetium-99 (Maps 25–27) is present in the Water Table and Barnwell/McBean aquifer zones below and south of the western end of the basins. Mercury (Maps 13–15) is present in the Water Table and Barnwell/McBean aquifer zones below and south of the eastern end of the basins.

Sum of Beta Dose

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

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

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

All the H-Area wells that exceed the 4 mrem standard also exceed the 50 pCi/L standard. However, the following wells exceed 50 pCi/L for summed beta activity, but do not exceed the 4 mrem/yr standard: HSB 70C, 84D, 101D, 111D, 113C, 114C, 115C, 117C, 119A, 125D, 126D, 136C, and 137C.

Background Results

Wells HSB 66, 83A, and 85B are the background wells for the H-Area HWMF. They are screened in the Water Table, Middle Congaree, and lower Barnwell/McBean aquifer zones, respectively.

In well HSB 66, tritium exceeded the GWPS of 20 pCi/mL during third and fourth quarter 1997 at 31 pCi/mL and 32 pCi/mL, respectively. Tritium has been above its GWPS during both third and fourth quarter of every year since 1993 and during second quarter 1995, but 1997 was the first time during this five-year period that tritium was reported above its GWPS during the first three months of the year. Results from third and fourth quarter 1997 show the continued presence of tritium. SRS is investigating the significance of these exceedances to HSB 66's status as a background well.

No constituents were found to exceed their GWPS in wells HSB 83A or 85B during third and fourth quarter 1997, although four constituents were reported at levels between the laboratory's detection limit in HSB 83A and eight were reported in HSB 85B.

Statistical Evaluation of Water Quality and Water Elevation Data (IIID.H.11.c.ix)

The H-Area RCRA Permit requires an annual statistical evaluation of water-quality and water-level data to assess significant changes or impacts associated with operation of the H-Area WTU. In

accordance with the RCRA permit, constituents listed in Appendix IIID-A, must be evaluated in all POC wells and in a representative number of plume assessment wells.

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

The selected wells for this statistical analysis include all POC wells (Appendix IIID-B of the RCRA permit) and a representative number of plume assessment wells, as listed below:

HSB117C	HSB129C	HSB137C
HSB125D	HSB129D	HSB137D
HSB126C	HSB135C	HSB139C
HSB126D	HSB135D	HSB139D
HSB127C	HSB136C	HSB145C
HSB127D	HSB136D	HSB145D

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

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

Qualification and Treatment of Data

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

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

Shewhart-CUSUM Calculations

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

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

where μ and σ are the mean and standard deviation of the background data, X_i is the average of the constituent measurements during the sampling period being plotted, and n_i is the number of sampling events in the sampling period being plotted (EPA, 1989). The sampling period for all

plots was quarterly. Based on the small number of multiple sampling events each quarter, the square-root term was removed from the above equation. An insignificant number of wells have been sampled more than once a quarter so the impact of this modification is expected to be minimal.

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

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

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

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

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

Plotting of Results

Shewhart-CUSUM control plots are given in Appendix F for those constituent/well pairings that made it through the data qualification and treatment process described above. An explanation of the analyte codes used in these plots is given in Appendix F. EPA (1989)-recommended values for the h and SCL control point parameters have been used and plotted appropriately. To maintain clarity and uniformity in all the control plots, the y-axis ranges have been set to between -8 to +8 standardized units. Standardized mean and cumulative sum values outside the plot limits have been truncated to the axes limit and plotted accordingly.

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

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

A number of the selected wells in H Area show gradual decreases in constituents, particularly the radioactive constituents. Analysis of the locations and timings of these trends suggest the decreases are due to the natural plume movement away from the basins and natural decay processes. However, there is a preliminary indication of increasing constituents in the extreme eastern side of the basins. Future monitoring analyses will be necessary to confirm this possibility. In addition, there are a number of plots that appear to indicate positive breakthrough of various constituents. Close examination of the data reveals that these may be questionable one-time sample values. Future samples are needed to confirm these indications. These trends will be tracked throughout the quarterly sampling periods and reported in the annual corrective action reports.

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

Table 3. Minimum and Maximum Background Water-Level Values

Well Name	Minimum	Maximum	3 rd Quarter Reading	4 th Quarter 1 st Reading	4 th Quarter 2 nd Reading
HSB100C	225.37	229.40	224.80	225.05	226.30
HSB100D	231.92	237.81	231.60	231.68	233.50
HSB101C	224.24	228.25	223.50	223.82	225.05
HSB101D	228.92	234.59	230.20	0.00	230.35
HSB102C	223.05	227.19	222.75	223.03	224.10
HSB102D	226.65	229.79	226.25	226.40	227.90
HSB103C	219.64	226.26	221.45	221.95	223.15
HSB103D	223.85	229.07	223.15	223.30	225.30
HSB104C	219.30	223.28	218.90	219.00	220.40
HSB104D	223.26	227.68	222.50	222.80	224.95
HSB105C	218.32	222.29	219.35	218.00	219.35
HSB105D	223.05	228.04	224.03	223.10	226.40
HSB106C	220.40	224.37	221.68	219.90	221.10
HSB106D	224.01	229.16	225.65	223.65	225.00
HSB107C	217.93	221.78	219.00	217.33	218.75
HSB107D	222.91	226.88	223.78	222.35	223.95
HSB108C	217.26	220.94	217.68	216.65	217.90
HSB108D	221.72	224.77	222.76	221.00	222.30
HSB109C	217.58	221.25	218.46	217.00	218.15
HSB109D	221.10	225.41	222.20	0.00	221.40
HSB110C	217.84	221.62	218.72	217.20	218.35
HSB110D	219.29	224.49	221.16	219.55	220.80
HSB111C	218.90	222.97	219.66	218.13	219.33
HSB111D	220.31	224.30	221.11	0.00	220.55
HSB111E	220.35	224.33	221.35	219.30	220.60
HSB112C	219.97	224.37	221.01	218.10	220.45
HSB112D	220.67	225.12	221.80	0.00	221.10
HSB112E	220.78	225.14	221.58	219.80	221.10
HSB113C	220.26	225.27	221.12	219.26	220.95
HSB113D	220.20	225.73	221.28	219.50	221.61
HSB114C	221.12	226.67	222.11	0.00	221.65
HSB114D	221.02	226.73	222.01	219.70	222.18
HSB115C	221.81	228.04	222.54	0.00	222.20

Well Name	Minimum	Maximum	3 rd Quarter Reading	4 th Quarter 1 st Reading	4 th Quarter 2 nd Reading
HSB115D	221.63	227.98	222.44	220.50	222.05
HSB116C	222.81	229.56	223.82	0.00	223.25
HSB116D	222.95	228.83	223.91	221.70	223.35
HSB117C	218.79	227.09	220.92	0.00	220.60
HSB119A	166.08	168.02	167.33	166.34	166.80
HSB120A	165.52	167.23	166.47	165.77	166.10
HSB121A	170.68	172.64	172.18	171.10	171.50
HSB122A	170.41	172.34	171.91	170.98	171.25
HSB123A	171.16	173.79	172.48	171.90	172.30
HSB124A	167.55	172.93	172.18	172.55	171.85
HSB125D	219.96	222.41	227.15	219.70	221.00
HSB126C	203.49	204.43	204.13	203.87	204.50
HSB126D	204.17	205.93	205.21	0.00	205.70
HSB127C	209.42	211.57	210.15	209.20	210.25
HSB127D	216.89	219.25	217.52	216.30	217.92
HSB129C	196.87	207.14	205.50	0.00	206.10
HSB129D	206.38	210.30	207.82	0.00	208.77
HSB135C	206.19	207.95	206.52	206.07	206.92
HSB135D	217.01	219.91	217.66	216.45	217.87
HSB136C	215.80	219.55	216.70	0.00	216.59
HSB136D	219.06	222.86	219.78	217.95	220.01
HSB137C	218.21	223.24	219.23	0.00	219.39
HSB137D	219.82	225.21	220.74	0.00	221.07
HSB139C	213.27	216.06	214.10	0.00	214.40
HSB139D	220.26	228.67	221.14	219.85	223.02
HSB145C	202.52	214.93	213.20	212.20	213.65
HSB145D	218.31	224.60	218.65	218.10	221.55

Water levels taken since the background time period that were out of the minimum/maximum range are given in Table 4. (Bolded values are third and fourth quarter 1997 out-of-range values.)

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

Well Name	Date	Test Value	Limit Type	Limited Value	Indicator
HSB100C	12/12/96	225.30	Minimum	225.37	Below
HSB100C	01/24/97	225.20	Minimum	225.37	Below
HSB100C	04/02/97	223.42	Minimum	225.37	Below
HSB100C	09/11/97	224.80	Minimum	225.37	Below
HSB100C	10/13/97	225.05	Minimum	225.37	Below
HSB100D	12/12/96	231.90	Minimum	231.92	Below
HSB100D	09/11/97	231.60	Minimum	231.92	Below
HSB100D	10/13/97	231.68	Minimum	231.92	Below
HSB100D	10/13/97	231.68	Minimum	231.92	Below
HSB101C	12/12/96	224.15	Minimum	224.24	Below
HSB101C	02/05/97	223.90	Minimum	224.24	Below
HSB101C	07/21/97	224.21	Minimum	224.24	Below
HSB101C	09/11/97	223.50	Minimum	224.24	Below
HSB101C	10/09/97	223.82	Minimum	224.24	Below
HSB102C	09/11/97	222.75	Minimum	223.05	Below
HSB102C	10/09/97	223.03	Minimum	223.05	Below
HSB102D	12/12/96	226.43	Minimum	226.65	Below
HSB102D	03/20/97	230.72	Maximum	229.79	Above
HSB102D	09/11/97	226.25	Minimum	226.65	Below
HSB102D	10/09/97	226.40	Minimum	226.65	Below
HSB102D	10/09/97	226.40	Minimum	226.65	Below
HSB103C	04/14/97	219.40	Minimum	219.64	Below
HSB103D	12/11/96	223.60	Minimum	223.85	Below
HSB103D	09/11/97	223.15	Minimum	223.85	Below
HSB103D	10/02/97	223.30	Minimum	223.85	Below
HSB104C	12/11/96	219.19	Minimum	219.30	Below
HSB104C	09/11/97	218.90	Minimum	219.30	Below
HSB104C	10/14/97	219.00	Minimum	219.30	Below
HSB104C	10/14/97	219.00	Minimum	219.30	Below
HSB104D	10/10/96	218.58	Minimum	223.26	Below
HSB104D	12/11/96	223.02	Minimum	223.26	Below
HSB104D	09/11/97	222.50	Minimum	223.26	Below
HSB104D	10/02/97	222.80	Minimum	223.26	Below
HSB105C	01/23/97	218.30	Minimum	218.32	Below
HSB105C	10/13/97	218.00	Minimum	218.32	Below

Well Name	Date	Test Value	Limit Type	Limited Value	Indicator
HSB106C	01/24/97	220.30	Minimum	220.40	Below
HSB106C	10/08/97	219.90	Minimum	220.40	Below
HSB106D	12/11/96	223.81	Minimum	224.01	Below
HSB106D	01/08/97	223.65	Minimum	224.01	Below
HSB106D	10/01/97	223.65	Minimum	224.01	Below
HSB106D	10/01/97	223.65	Minimum	224.01	Below
HSB107C	01/20/97	217.80	Minimum	217.93	Below
HSB107C	07/14/97	217.90	Minimum	217.93	Below
HSB107C	10/13/97	217.33	Minimum	217.93	Below
HSB107D	12/11/96	222.62	Minimum	222.91	Below
HSB107D	02/14/97	222.90	Minimum	222.91	Below
HSB107D	10/01/97	222.35	Minimum	222.91	Below
HSB108C	12/11/96	217.20	Minimum	217.26	Below
HSB108C	01/20/97	217.15	Minimum	217.26	Below
HSB108C	03/18/97	215.20	Minimum	217.26	Below
HSB108C	04/01/97	215.14	Minimum	217.26	Below
HSB108C	04/01/97	215.14	Minimum	217.26	Below
HSB108C	10/13/97	216.65	Minimum	217.26	Below
HSB108D	12/11/96	221.48	Minimum	221.72	Below
HSB108D	02/14/97	221.60	Minimum	221.72	Below
HSB108D	10/01/97	221.00	Minimum	221.72	Below
HSB109C	12/11/96	217.44	Minimum	217.58	Below
HSB109C	01/20/97	217.40	Minimum	217.58	Below
HSB109C	07/21/97	217.50	Minimum	217.58	Below
HSB109C	10/13/97	217.00	Minimum	217.58	Below
HSB109C	10/13/97	216.80	Minimum	217.58	Below
HSB109D	07/02/97	220.95	Minimum	221.10	Below
HSB109D	07/03/97	220.95	Minimum	221.10	Below
HSB110C	01/16/96	217.15	Minimum	217.84	Below
HSB110C	12/11/96	217.70	Minimum	217.84	Below
HSB110C	01/20/97	217.75	Minimum	217.84	Below
HSB110C	10/09/97	217.20	Minimum	217.84	Below
HSB110C	10/09/97	217.20	Minimum	217.84	Below
HSB111C	12/11/96	218.66	Minimum	218.90	Below
HSB111C	01/23/97	218.75	Minimum	218.90	Below
HSB111C	01/23/97	218.75	Minimum	218.90	Below
HSB111C	07/22/97	218.70	Minimum	218.90	Below

Well Name	Date	Test Value	Limit Type	Limited Value	Indicator
HSB111C	10/09/97	218.13	Minimum	218.90	Below
HSB111D	12/11/96	220.14	Minimum	220.31	Below
HSB111D	07/17/97	220.10	Minimum	220.31	Below
HSB111E	12/11/96	220.08	Minimum	220.35	Below
HSB111E	02/18/97	218.15	Minimum	220.35	Below
HSB111E	10/02/97	219.30	Minimum	220.35	Below
HSB112C	12/11/96	219.61	Minimum	219.97	Below
HSB112C	01/23/97	219.50	Minimum	219.97	Below
HSB112C	07/22/97	219.92	Minimum	219.97	Below
HSB112C	10/07/97	218.10	Minimum	219.97	Below
HSB112D	03/19/97	219.34	Minimum	220.67	Below
HSB112E	12/11/96	220.57	Minimum	220.78	Below
HSB112E	02/13/97	220.60	Minimum	220.78	Below
HSB112E	02/14/97	220.60	Minimum	220.78	Below
HSB112E	07/01/97	220.65	Minimum	220.78	Below
HSB112E	07/02/97	220.65	Minimum	220.78	Below
HSB112E	10/01/97	219.90	Minimum	220.78	Below
HSB112E	10/02/97	219.80	Minimum	220.78	Below
HSB113C	12/11/96	219.88	Minimum	220.26	Below
HSB113C	01/24/97	219.90	Minimum	220.26	Below
HSB113C	07/23/97	220.00	Minimum	220.26	Below
HSB113C	10/07/97	219.26	Minimum	220.26	Below
HSB113D	10/08/97	219.50	Minimum	220.20	Below
HSB113D	10/08/97	219.50	Minimum	220.20	Below
HSB114C	07/17/97	221.10	Minimum	221.12	Below
HSB114D	12/11/96	220.81	Minimum	221.02	Below
HSB114D	02/11/97	220.85	Minimum	221.02	Below
HSB114D	07/07/97	220.60	Minimum	221.02	Below
HSB114D	10/08/97	219.70	Minimum	221.02	Below
HSB115C	12/11/96	221.51	Minimum	221.81	Below
HSB115C	07/17/97	221.75	Minimum	221.81	Below
HSB115D	02/21/96	221.30	Minimum	221.63	Below
HSB115D	12/11/96	221.42	Minimum	221.63	Below
HSB115D	02/11/97	221.40	Minimum	221.63	Below
HSB115D	02/11/97	221.40	Minimum	221.63	Below
HSB115D	07/02/97	221.30	Minimum	221.63	Below
HSB115D	07/03/97	221.30	Minimum	221.63	Below

Well Name	Date	Test Value	Limit Type	Limited Value	Indicator
HSB115D	08/20/97	221.20	Minimum	221.63	Below
HSB115D	08/20/97	221.20	Minimum	221.63	Below
HSB115D	10/08/97	220.50	Minimum	221.63	Below
HSB115D	10/09/97	220.50	Minimum	221.63	Below
HSB116C	12/12/96	222.40	Minimum	222.81	Below
HSB116C	07/18/97	222.70	Minimum	222.81	Below
HSB116D	02/22/96	243.25	Maximum	228.83	Above
HSB116D	02/23/96	243.23	Maximum	228.83	Above
HSB116D	12/12/96	222.56	Minimum	222.95	Below
HSB116D	01/30/97	222.65	Minimum	222.95	Below
HSB116D	01/30/97	222.65	Minimum	222.95	Below
HSB116D	10/02/97	221.70	Minimum	222.95	Below
HSB116D	10/02/97	221.70	Minimum	222.95	Below
HSB117C	09/17/96	218.64	Minimum	218.79	Below
HSB117C	10/31/96	218.65	Minimum	218.79	Below
HSB117C	12/12/96	218.32	Minimum	218.79	Below
HSB123A	01/16/96	153.90	Minimum	171.16	Below
HSB123A	04/16/96	164.00	Minimum	171.16	Below
HSB125D	10/25/96	219.90	Minimum	219.96	Below
HSB125D	09/15/97	227.15	Maximum	222.41	Above
HSB125D	10/02/97	219.70	Minimum	219.96	Below
HSB126C	12/18/97	204.50	Maximum	204.43	Above
HSB126D	03/18/96	205.93	Maximum	205.93	Above
HSB127C	12/16/96	208.71	Minimum	209.42	Below
HSB127C	10/07/97	209.20	Minimum	209.42	Below
HSB127D	10/07/97	216.30	Minimum	216.89	Below
HSB135C	10/15/97	206.07	Minimum	206.19	Below
HSB135D	12/12/96	216.81	Minimum	217.01	Below
HSB135D	10/07/97	216.45	Minimum	217.01	Below
HSB136C	10/28/96	215.75	Minimum	215.80	Below
HSB136C	12/12/96	215.58	Minimum	215.80	Below
HSB136D	10/15/96	218.90	Minimum	219.06	Below
HSB136D	12/12/96	218.71	Minimum	219.06	Below
HSB136D	08/20/97	218.75	Minimum	219.06	Below
HSB136D	10/08/97	217.95	Minimum	219.06	Below
HSB137C	04/26/96	216.30	Minimum	218.21	Below
HSB137C	12/12/96	217.76	Minimum	218.21	Below

Well Name	Date	Test Value	Limit Type	Limited Value	Indicator
HSB137D	12/12/96	219.40	Minimum	219.82	Below
HSB139D	12/12/96	220.02	Minimum	220.26	Below
HSB139D	03/18/97	219.92	Minimum	220.26	Below
HSB139D	10/07/97	219.85	Minimum	220.26	Below
HSB139D	10/13/97	219.70	Minimum	220.26	Below
HSB145D	10/09/97	218.10	Minimum	218.31	Below

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

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

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

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

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

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

Well	Rate (gpm)	July* 1997	August* 1997	September* 1997	October* 1997	November* 1997	December* 1997	Cum. Total
HEX 1	20	2,921		121,224	30,110	5,019	28,690	187,965
HEX 2	10	428		17,776	221	1,367	19,121	38,914
HEX 3	15	2,100		87,124	21,357	3,576	21,653	135,809
HEX 4	20	2,614		108,460	25,273	4,847	31,558	172,753
HEX 5	-	-	-	-	-	-	-	-
HEX 6	-	-	-	-	-	-	-	-
HEX 7	-	-	-	-	-	-	-	-
HEX 8	-	-	-	-	-	-	-	-
HEX 9	10	1,037		43,027	10,870	2,354	9,336	66,624
HEX 12	5	587		24,340	7,631	1,140	0	33,698
HEX 16	20	2,689		111,580	27,390	5,297	27,352	174,308
HEX 17	25	2,771		114,993	28,384	0	29,442	175,589
HEX 18	30	3,539		146,860	37,661	0	32,511	220,571
HEX 19	5	415		17,215	3,863	0	5,799	27,292
Total		19,100	-	792,600	192,761	23,601	205,462	1,233,524

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

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

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

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

Well	Rate (gpm)	July* 1997	August* 1997	September* 1997	October* 1997	November* 1997	December* 1997	Cum. Total
HIN 1	5	-	825	32,180	8,445	-	6,354	47,805
HIN 2	15	-	787	103,858	27,256	-	26,162	158,063
HIN 3	10	-	712	54,736	14,365	-	4,776	74,588
HIN 4	10	-	788	107,688	28,261	-	21,698	158,435
HIN 5	15	-	603	111,947	29,379	-	28,271	170,199
HIN 6	10	-	690	100,237	26,306	-	26,655	153,887
HIN 7	10	-	737	82,268	21,590	-	25,796	130,390
HIN 8	15	-	576	107,312	28,162	-	35,083	171,133
HIN 9	5	-	329	43,565	11,433	-	12,152	67,478
HIN 10	5	-	753	34,311	9,004	-	9,554	53,622
Total		-	6,800	778,100	204,200	-	196,500	1,185,600

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

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

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

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

	Jul. 1997	Aug. 1997	Sep. 1997	3-Month Total	Oct. 1997	Nov. 1997	Dec. 1997	6-Month Total
Rainfall	6.59	1.39	5.42	13.40	5.08	4.57	8.89	31.94
Recharge	1.98	0.42	1.63	4.02	1.52	1.37	2.66	9.58

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

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

SRS has initiated significant effort to correct the clarifier carryover and water-quality problems. The H-Area WTU is still experiencing problems, and additional process improvements are anticipated prior to commencing full-scale operations. Two ion exchange columns have been proposed to address the water quality concerns. Additional injection wells are being proposed to

address the injection system limitations. A filtrate return tank has been proposed to return filtrate water from the filter press operations to the clarifier at a controlled rate. Several independent wastewater treatment experts (including representatives from industry, academia, and the consulting fields) have been consulted to review the treatment system and recommend improvements. Full scale operations are anticipated to commence during late summer 1998.

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

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

Month	Run Percent	Hours Up	Hours Down	Dates Down	Explanation
July	0	0	744	1-31	Testing, obtained initial batch sample and shut down while waiting for results
August	0.3	2	742	1-14	Injection well redevelopment for all wells
				16-31	Routine maintenance
September	20.2	145	575	1-4	Routine maintenance
				6-7	Shut down for weekend
				12-14	High RO permeate pressure
				17	Removed baffles from clarifier
				19-21	Shut down for weekend, prepare for 100-hour test
				24	Decision to end 100-hour test, PC/PLC crashes and lock-ups, unable to transfer sludge from clarifier, insufficient injection capacity, numerous component failures with excessive maintenance time, unable to sustain two-train operation, sludge carryover from clarifier
				27-28	Shut down for weekend
October	5.7	43	701	3-5	Shut down for weekend
				6	Sludge build-up in the clarifier resulting in blockage and over fill. High alarm added
				9-31	Over pressurization of permeate line for the A RO train, redesign pipe to code requirements, added high pressure interlock to PLC program, pressure testing, failure of RO concentrate pump A due to sand from the sand filters, sand filters were found to be over filled, concentrate pumps were repaired, sand was flushed out of the piping and concentrate tank into the sludge tank, sand filters were opened to remove sand, supporting F-Area activities, resolving problems with over pressurization
November	0	0	720	1-30	Aluminum and polymer addition to system, transferred water in injection tank back to extraction tank

Month	Run Percent	Hours Up	Hours Down	Dates Down	Explanation
December	5.5	40	703	1-2	Aluminum and polymer addition to system, transferred water in injection tank back to extraction tank
				3-8	Electrical problems, loose/burned bolts on bus bars in MCC, repairs
				11-14	Filter press blowdown and cleaning for weekend shut down
				17-31	Reached SCDHEC 200,000 gallon process limit, holidays
Total	5.2	231	4185		

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

The H-Area WTU has experienced problems with poor water quality and sludge carryover into the polishing system since shakedown operations commenced in July 1997. Modifications to the H-Area WTU during third and fourth quarter 1997 basically consisted of modifications to the clarifier in an attempt to minimize the carryover problems. Carryover from the clarifier reached the ion exchangers, requiring frequent backwashes and reducing the exchanger (resin) lifetime. Carryover from the clarifier is believed to be a cause of water quality problems for certain constituents.

Three baffles were removed from the clarifier to facilitate flow. A polymer addition system was added to the clarifier mixing chamber to improve flocculation and coagulation in an attempt to reduce carryover from the clarifier. Aluminum was also added to the process in an attempt to improve the ionic content of the H-Area groundwater and reduce carryover. H Area has a significantly lower aluminum content than F Area, and this change was expected to make the H-Area chemistry more similar to the F-Area chemistry. The physical changes have not corrected the clarifier carryover problems, nor have they improved the system's capability to remove radionuclides. Additional process modifications (equipment and chemistry) will be required to reduce the carryover and improve the treated water quality prior to commencing full-scale operations.

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

The H-Area WTU operated in a shakedown mode during third and fourth quarter 1997 but has not commenced full-scale operation. A statistical analysis was completed on the POC wells and a representative number of plume assessment wells, but this information basically serves as a baseline for future reports. The statistical analysis did identify groundwater trends for a few constituents, and this information is discussed in Section IIID.H.11.b.ix of this report. Based on the operations through this reporting period, no appreciable hydraulic control has been achieved.

Underground Injection Control (UIC) Sampling Results

SRS has collected samples to determine compliance with UIC standards as specified in the operating permit issued (4/17/97 for F Area and 5/19/97 for H Area). The results of these samples are presented in Appendix G. In accordance with the permit requirements the initial operation of the unit proceeded in a batch mode. An initial run was processed and stored in the injection tank while analyses were performed. The first batch of treated groundwater met screening limits specified in the operating permit and was then released for injection upon approval by SCDHEC. Continuous operations were initiated, and monthly samples were then collected. In accordance with the operating permit, whenever any analyte exceeds its permitted

standard, the next monthly sample is used as a confirmation sample. If the confirmation sample is elevated, the unit is shut down, and UIC staff members at SCDHEC are notified. SRS then proposes a corrective action to the treatment system, and, if approved, permission is granted to restart the unit.

The initial batch sample (July 1997) met the screening criteria for gross alpha, nonvolatile (gross) beta, strontium-90, and radium. The subsequent detailed analysis revealed that all measured constituents were under the required limits. Tetrachloroethylene and trichloroethylene were not analyzed due to a request for the wrong volatile constituents. Uranium-235 was not specified in the sample request process. SCDHEC staff members were notified of these errors.

Analytical problems have resulted in the following constituent not being reportable at the permit-required standard.

August: The detection limit for antimony was over the permit standard.
September: The detection limit for antimony was over the permit standard.
October: The detection limit for antimony was over the permit standard.
November: The detection limit for antimony was over the permit standard.
December: The detection limit for antimony was over the permit standard.

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

July: None.
August: Nonvolatile beta. Iodine-129, strontium-90, and technetium-99 were the primary elevated beta contributors.
September: Nonvolatile beta, the sum of the beta contributors and strontium-90. Radium-228 was reported as an estimated value, but was probably over the 5 pCi/L limit (total radium was probably elevated, also). Technetium-99 was another contributor to the elevated sum of the beta contributors. Iodine-129 was reported as an estimated results and was probably detected but under the standard of 50 pCi/L.
October: Gross alpha, nonvolatile beta, total radium, carbon-14, radium-228, and the sum of the beta contributors. Strontium-90 was reported as an estimated value but was probably over the 50 pCi/L limit. Technetium-99 and iodine-129 contributed to the elevated sum of the betas.
November: Nonvolatile beta, total radium, radium-228, strontium-90, and the sum of the beta contributors. Cobalt-60, nickel-63, iodine-129, and technetium-99 contributed to the elevated sum of the betas.
December: Nonvolatile beta, total radium, carbon-14, radium-228, and the sum of the beta contributors. Iodine-129 and technetium-99 contributed to the elevated sum of the betas. Strontium-90 was reported as an estimated value but was probably elevated over the 50 pCi/L limit.

Appendix A

Groundwater Protection Standard

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Table A-1. Groundwater Protection Standard

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

Analyte	Concentration/ Activity Limit	Unit
<i>Inorganic Constituents</i>		
Antimony	6	µg/L
Arsenic	50	µg/L
Barium	2,000	µg/L
Cadmium	5	µg/L
Chromium	100	µg/L
Cobalt	3 ^a	µg/L
Copper	1,300	µg/L
Cyanide	20 ^b	µg/L
Lead	15	µg/L
Mercury	2	µg/L
Nickel	100	µg/L
Nitrate	10,000	µg/L
Selenium	50	µg/L
Silver	50	µg/L
Tin	2.6 ^a	µg/L
Vanadium	4 ^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
Tetrachloroethylene	5	µg/L
Trichloroethylene	5	µg/L
Trichlorofluoromethane	5 ^d	µg/L
<i>Radionuclide Constituents</i>		
Gross alpha	15	pCi/L
Nonvolatile beta	50 ^e	pCi/L
Tritium	20,000	pCi/L
Americium-241	Sum of alphas <15 pCi/L	pCi/L
Carbon-14	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Cobalt-60	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Curium-242	Sum of alphas <15 pCi/L	pCi/L
Curium-243/244	Sum of alphas <15 pCi/L	pCi/L
Curium-245/246	Sum of alphas <15 pCi/L	pCi/L
Iodine-129	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Nickel-63 ^f	Sum of beta dose <4 mrem/yr and	pCi/L

Analyte	Concentration/ Activity Limit	Unit
	<50 pCi/L	
Plutonium-238	Sum of alphas <15 pCi/L	pCi/L
Plutonium-239/240	Sum of alphas <15 pCi/L	pCi/L
Radium-226	Total radium <5 pCi/L	pCi/L
Radium-228	Sum of beta dose <4 mrem/yr and <50 pCi/L and total radium <5 pCi/L	pCi/L
Strontium-90	Sum of beta dose <4 mrem/yr and <50 pCi/L and strontium-90 <8 pCi/L	pCi/L
Technetium-99	Sum of beta dose <4 mrem/yr and <50 pCi/L	pCi/L
Thorium-228	Sum of alphas <15 pCi/L	pCi/L
Thorium-230	Sum of alphas <15 pCi/L	pCi/L
Thorium-232	Sum of alphas <15 pCi/L	pCi/L
Total alpha-emitting radium ⁹	5	pCi/L
Total radium (radium-226 and -228)	5	pCi/L
Uranium-233/234	Sum of alphas <15 pCi/L	pCi/L
Uranium-234	Sum of alphas <15 pCi/L	pCi/L
Uranium-235	Sum of alphas <15 pCi/L	pCi/L
Uranium-238	Sum of alphas <15 pCi/L	pCi/L

-
- a Concentrations are observed background levels.
- b Concentration is the practical quantitation limit (PQL) for EPA Method 335.2 (used by WA) and 335.3 (used by GE).
- c Concentration is the PQL for EPA Method 8270 as published in 40CFR Part 264, Appendix IX.
- d Concentration is the PQL for EPA Method 8240 as published in 40CFR Part 264, Appendix IX.
- e 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.
- f The activity of nickel-63 is calculated based on the activity of cobalt-60 until development of a reliable analytical method as required by permit condition IIIC.H.6.f.
- g Results reported by this analysis, which does not distinguish among radium-223, radium-224, and radium-226, are assumed to be primarily radium-226 and are compared to the GWPs for total radium.

Table A-2. Regulatory Limits for UIC Permitted Constituents

Constituent	Reg. Limit	Unit
Section I, Inorganics		
Arsenic	50	µg/L
Barium	2,000	µg/L
Cadmium	5	µg/L
Chromium	100	µg/L
Lead	50	µg/L
Mercury	2	µg/L
Selenium	50	µg/L
Silver	50	µg/L
Section II, Organics		
Antimony	6	µg/L
Cobalt	140	µg/L
Copper	1,300	µg/L
Cyanide	200,000	µg/L
Benzene	5	µg/L
Bis(2-ethylhexyl) phthalate	140	µg/L
Methylene chloride (Dichloromethane)	5	µg/L
Nickel	100	µg/L
Tetrachloroethylene	5	µg/L
Tin	50	µg/L
Trichloroethylene	5	µg/L
Trichlorofluoromethane	100	µg/L
Vanadium	49	µg/L
Zinc	5,000	µg/L
Section III, Radionuclides		
Gross Alpha	15	pCi/L
Gross Beta	50	pCi/L
Total Radium (226+228)	5	pCi/L
Section IV, Radionuclides		
Americium-241	SOA	pCi/L
Cesium-137	SOB	pCi/L
Curium-242	SOA	pCi/L
Curium-243/244	SOA	pCi/L
Curium-246	SOA	pCi/L

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

Appendix B

Figures

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

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

Figure 3. Location of Aquifer Zone IIB₂ (Water Table) Groundwater Monitoring Wells at the H-Area HWMF

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H AREA SEEPAGE BASINS HYDROS CROSS-SECTION E

STRATIGRAPHIC

SAND PACK INTERVAL-
INCLUDES BENTONITE SEAL
SCREENED INTERVAL

TD = TOTAL DEPTH
GSA = GENERAL SEPARATIONS AREA
NR = NO RECOVERY
* BASIN H-4 PLACED TO SCALE
RELATIVE TO HSB-119
— = CONFINING ZONE, UNIT, AND SYSTEM BOUNDARIES.
GEOPHYSICAL CURVE = NATURAL GAMMA

SCALE
HORIZONTAL 0 200 400 FEET
VERTICAL 0 5 10 15 20 FEET

H AREA SEEPAGE BASINS HYDROS CROSS-SECTION B

RATIGRAPHIC

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H AREA SEEPAGE BASINS HYDROGEOLOGIC CROSS-SECTION E

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STRATIGRAPHIC

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RATIGRAPHIC

Appendix C

Groundwater Monitoring Results Tables

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Key to Reading the Tables

The following abbreviations may appear in the data tables:

Constituents

Sp. conductance specific conductance

Laboratories

EM	Environmental Protection Department/Environmental Monitoring Section (EPD/EMS) Laboratory
ES	QST Environmental (was Environmental Science & Engineering until June 1997)
EX	EMAX Laboratories, Inc.
GE and GP	General Engineering Laboratories, Inc.
QR	Quanterra, Inc.
TM	Thermo NUtech
WA and WS	Recra LabNet Philadelphia (was Roy F. Weston, Inc., until June 1997)

Sampling Codes

A	pump was surging excessively; aerated
B	blank sample was collected
C	well was pumping continuously
D	well was dry
E	equipment blank was collected
I	well went dry during sampling; insufficient water to collect all samples
L	well went dry before sampling began; only depth to water can be determined
N	well was not stabilized before sampling began
P	inaccessibility or mechanical failure prevented sample collection and field analysis of the water
S	no water in standpipe; for water-level events only
T	samples were collected, but some samples were not sent to the laboratory due to high turbidity
W	Unable to sample well because of stabilization or sampling equipment failure; water-level measurements were obtained
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
O	sample collected by method other than bailer or pump
P	sample collected using a bladder pump
S	sample collected using a single-speed centrifugal downhole pump
V	sample collected using a variable-speed pump

Units

mg/L	milligrams per liter
msl	mean sea level
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., 1.1E-09 = 1.1×10^{-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

Results below Detection

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

Holding Times

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

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

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

Data Rounding

A constituent result in the analytical results tables that is not marked in the *ST* column but appears to equal an Appendix A standard is below the standard in the database. Values stored in the database

contain more significant digits than the reported results. Apparent discrepancies in the tables are due to the rounding of reported results.

Data Qualification

The contract laboratories submit sample- or batch-specific quality assurance/quality control information either at the same time as analytical results or in a quarterly summary. Properly defined and used data modifiers (also referred to as qualifiers) can be a key component in assessing data usability. Modifiers designed by EPD/EMS and provided to the primary laboratories are defined below. These modifiers appear in the data tables under the column *Mod*. All lettered modifiers except *E* are based on EPA's STORET codes.

Modifiers

(Blank)	Data are not qualified. Numbers should be interpreted exactly as reported.
E	The detected result is between the sample-specific EQL and the method detection limit.
I	The value in the result field is the instrument reading, not the sample quantitation limit. Always used with the result qualifier <i>U</i> .
J	Value is estimated because quantitation in the sample or in associated quality control samples did not meet specifications.
L	Value is off-scale high. The actual value is not known but is known to be greater than the value shown.
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.
4	Matrix interference. Value cannot be determined. Used with <i>R</i> .

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

Sampling Dates

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

Table C-1. Groundwater Monitoring Results for Individual Wells

WELL HSB 65

<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>	
N72425.6 E58432.0	33.281296 °N 81.653622 °W	242.4-212.4 ft msl	272 ft msl	4" PVC	S	Water Table (IIB2)	
SAMPLE DATE		07/01/97			10/15/97		
FIELD DATA							
<u>Parameter</u>	<u>3Q97</u>			<u>4Q97</u>		<u>Unit</u>	
Water elevation	233.4			232.2		ft msl	
pH	4.8			4.0		pH	
Sp. conductance	40			42		µS/cm	
Water temperature	22.0			21.0		°C	
Alkalinity as CaCO3	27			0		mg/L	
Turbidity	7			1		NTU	
Volumes purged	4.4			3.9		well volumes	
Sampling code							
Synchronous water level	222.7 (09/11/97)			231.0 (12/18/97)		ft msl	
ANALYTICAL DATA							
<i>Inorganic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable							
Arsenic, total recoverable							
Barium, total recoverable							
Cadmium, total recoverable							
Chromium, total recoverable							
Cobalt, total recoverable							
Copper, total recoverable							
Cyanide							
Lead, total recoverable							
Mercury, total recoverable	0.32	1				GE	µg/L
Nickel, total recoverable							
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen	2,200	2	V			GE	µg/L
Selenium, total recoverable							
Silver, total recoverable							
Tin, total recoverable							
Vanadium, total recoverable							
Zinc, total recoverable							
<i>Organic Constituents</i>							
<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene							
Bis(2-ethylhexyl) phthalate							
Dichloromethane							
Tetrachloroethylene							
Trichloroethylene							
Trichlorofluoromethane							

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

● = exceeded holding time

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

WELL HSB 65 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.7E+00	1				GP	2.5E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.2E+00	1	UI			GP	1.5E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.9E+01	1		■		GP	2.3E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 65A

<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>
N72436.2 E58436.0	33.281326 °N 81.653633 °W	73.2-62.5 ft msl	273.6 ft msl	4" PVC	S	L. Congaree (IIA)

SAMPLE DATE	07/01/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	170.7	170.7	ft msl
pH	7.6	7.0	pH
Sp. conductance	180	180	µS/cm
Water temperature	22.0	21.0	°C
Alkalinity as CaCO ₃	34	101	mg/L
Turbidity	3	1	NTU
Volumes purged	2.2	2.2	well volumes
Sampling code			
Synchronous water level	170.6 (09/11/97)	171.2 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.12	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<30	1	V			GE	<60	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 65A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.1E-01	1	UI			GP	1.4E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.6E+00	1				GP	1.8E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.8E-01	1				GP	1.4E-01	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 65B

<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>
N72445.6 E58439.4	33.281352 °N 81.653642 °W	133.3-123.3 ft msl	273.7 ft msl	4" PVC	S	McBean (IIB1)

SAMPLE DATE	07/21/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	223.6	222.6	ft msl
pH	7.2	7.6	pH
Sp. conductance	160	180	µS/cm
Water temperature	19.0	20.0	°C
Alkalinity as CaCO ₃	28	94	mg/L
Turbidity	5	1	NTU
Volumes purged	2.6	2.5	well volumes
Sampling code			
Synchronous water level	222.7 (09/11/97)	224.0 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	580	1	V			WA	<60	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 65B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	4.0E-02	1	UI			TM	2.0E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.7E+00	1				GP	4.2E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.0E-02	1	UI			TM	1.2E-01	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 65C

<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>
N72439.6 E58447.1	33.281351 °N 81.653610 °W	218.6-207.8 ft msl	273.6 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/01/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	231.0	230.9	ft msl
pH	4.6	4.8	pH
Sp. conductance	48	56	µS/cm
Water temperature	21.0	23.0	°C
Alkalinity as CaCO ₃	2	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.6	3.6	well volumes
Sampling code			
Synchronous water level	231.1 (09/11/97)	232.0 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.51	1				GE	0.42	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,000	3				GE	3,300	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 65C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.0E+00	1				GP	2.1E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.2E+00	1	UI			GP	4.7E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.6E+01	1		■		GP	3.3E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 66

<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>
N72429.2 E56928.3	33.278850 °N 81.657589 °W	228.1-198.1 ft msl	280.2 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/01/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	225.9	224.0	ft msl
pH	4.0	4.0	pH
Sp. conductance	56	38	µS/cm
Water temperature	20.0	20.0	°C
Alkalinity as CaCO ₃	0	1	mg/L
Turbidity	4	7	NTU
Volumes purged	2.6	5.8	well volumes
Sampling code			
Synchronous water level	223.1 (09/11/97)	223.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.13	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,800	3				GE	2,500	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 66 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+00	1				GP	6.7E-01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	5.6E-01	1	UI			GP	3.1E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.1E+01	1		■		GP	3.2E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 67

<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>
N71505.0 E58424.3	33.279247 °N 81.651855 °W	230.7-200.7 ft msl	237.8 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation		223.5	ft msl
pH	3.8	3.8	pH
Sp. conductance	96	98	µS/cm
Water temperature	20.0	23.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	0	NTU
Volumes purged		2.7	well volumes
Sampling code			
Synchronous water level	221.4 (09/11/97)	223.5 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	1.7	1				GE	1.9	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,300	10				GE	7,600	20				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 67 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.2E+01	1		■		GP	2.9E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	9.3E+02	1		■		GP	8.5E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.6E+02	1		■		GP	1.7E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 68

<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>
N71528.0 E56901.0	33.276813 °N 81.655911 °W	243.3-213.3 ft msl	250.1 ft msl	4" PVC	V	Water Table (HB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.1	219.4	ft msl
pH	4.0	4.0	pH
Sp. conductance	140	140	µS/cm
Water temperature	20.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	2	NTU
Volumes purged	10	7.3	well volumes
Sampling code			
Synchronous water level	219.6 (09/11/97)	220.98 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	2.5	1		■		GE	2.0	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	15,000	10		■		GE	12,000	20		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 68 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.8E+01	1		■		GP	2.8E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.0E+03	1		■		GP	2.9E+03	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.3E+02	1	V	■		GP	3.8E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 68A

<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>
N71526.9 E56892.1	33.276796 °N 81.655932 °W	58.0-47.5 ft msl	249.4 ft msl	4" PVC	S	L. Congaree (IIA)

SAMPLE DATE	07/08/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	171.1	172.1	ft msl
pH	6.4	6.6	pH
Sp. conductance	100	120	µS/cm
Water temperature	20.0	23.0	°C
Alkalinity as CaCO ₃	25	59	mg/L
Turbidity	1	2	NTU
Volumes purged	2.4	2.6	well volumes
Sampling code			
Synchronous water level	171.4 (09/11/97)	171.69 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.16	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	80	1				GE	120	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 68A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>7.1E-01</i>	1	UI			GP	<i>5.4E-01</i>	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>2.4E+00</i>	1				GP	<i>7.3E+00</i>	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>1.2E+00</i>	1				GP	<i>1.3E-01</i>	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 68B

<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>
N71525.5 E56882.1	33.276776 °N 81.655956 °W	134.5-123.5 ft msl	250 ft msl	4" PVC	S	McBean (IIB1)

SAMPLE DATE	07/08/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	216.0	215.8	ft msl
pH	7.4	7.6	pH
Sp. conductance	180	180	µS/cm
Water temperature	23.0	24.0	°C
Alkalinity as CaCO ₃	31	120	mg/L
Turbidity	13	11	NTU
Volumes purged	0.016	2.6	well volumes
Sampling code	XN		
Synchronous water level	215.2 (09/11/97)	216.75 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.11	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	310	1				GE	260	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 68B (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.3E+00	1				GP	8.9E-01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.8E+00	1				GP	2.3E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.0E+01	1				GP	1.4E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 68C

<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>
N71524.1 E56872.7	33.276758 °N 81.655978 °W	179.5-168.4 ft msl	250.1 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/17/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	216.6	216.6	ft msl
pH	5.6	5.8	pH
Sp. conductance	100	120	µS/cm
Water temperature	21.0	18.0	°C
Alkalinity as CaCO ₃	4	15	mg/L
Turbidity	2	25	NTU
Volumes purged	0.032	0.063	well volumes
Sampling code	XN	XN	
Synchronous water level	215.9 (09/11/97)	217.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	1.2	1				GE	2.0	1	V			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	13,000	10				GE	11,000	10	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 68C (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	9.4E-01	1	UI			GP	9.1E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.6E+01	1				GP	1.3E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.1E+03	1		■		GP	2.1E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 69

<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>
N71546.9 E56475.1	33.276160 °N 81.657069 °W	229.0-199.0 ft msl	236 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	218.0	217.5	ft msl
pH	4.0	3.8	pH
Sp. conductance	56	58	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	2.9	2.9	well volumes
Sampling code			
Synchronous water level	217.5 (09/11/97)	218.8 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.18	1	JE			GE	0.30	1	J			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,400	3				GE	3,300	3				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 69 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	4.1E+00	1				GP	1.8E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	6.6E+02	1		■		GP	7.0E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.5E+01	1		■		GP	4.1E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 69A

<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>
N71549.4 E56465.1	33.276149 °N 81.657100 °W	93.1-83.1 ft msl	236.6 ft msl	4" PVC	S	M. Congaree (IIA)

SAMPLE DATE	07/01/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	171.5	171.8	ft msl
pH	6.4	6.0	pH
Sp. conductance	120	120	µS/cm
Water temperature	20.0	20.0	°C
Alkalinity as CaCO ₃	31	27	mg/L
Turbidity	3	1	NTU
Volumes purged	2.4	2.5	well volumes
Sampling code			
Synchronous water level	171.5 (09/11/97)	171.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	10	1	JE			GE	<50	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 69A (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+00	1				GP	1.3E+00	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.3E+00	1	UI			GP	5.7E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	-2.2E-01	1	UI			GP	-3.3E-01	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 70

<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>
N72606.9 E55758.9	33.277336 °N 81.661013 °W	235.7-205.7 ft msl	242.8 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/17/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.4	223.3	ft msl
pH	5.0	4.3	pH
Sp. conductance	52	57	µS/cm
Water temperature	21.0	18.2	°C
Alkalinity as CaCO ₃	10	9	mg/L
Turbidity	1	2	NTU
Volumes purged	6.8	4.4	well volumes
Sampling code			
Synchronous water level	220.5 (09/11/97)	222.32 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.33	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	660	1	V			GE	770	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 70 (cont.)

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.4E+00	1				GP	1.0E+00	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.1E+01	1				GP	1.1E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.0E+01	1		■		GP	3.8E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 70C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72597.3 E55757.1	33.277311 °N 81.660999 °W	174.9-164.9 ft msl	243.1 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/21/97	10/27/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	221.1	219.8	ft msl
pH	6.4	9.4	pH
Sp. conductance	360	520	µS/cm
Water temperature	21.0	18.0	°C
Alkalinity as CaCO ₃	43	46	mg/L
Turbidity	1	2	NTU
Volumes purged	0.027	0.028	well volumes
Sampling code	XN	XN	
Synchronous water level	219.5 (09/11/97)	221.85 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	100	1	V			GE							µg/L
Cadmium, total recoverable	0.38	1	JE			GE							µg/L
Chromium, total recoverable	2.3	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.5	1	JE			GE							µg/L
Cyanide	5.5	1	JE			GE							µg/L
Lead, total recoverable	4.5	1	JE			GE							µg/L
Mercury, total recoverable	0.10	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable	3.3	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	37,000	20		■		GE	27,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<19	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 70C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	6.7E-02	1	UI			GP							pCi/L
Carbon-14	2.8E+02	1		■		GP							pCi/L
Cobalt-60	2.2E+00	1	UI			GP							pCi/L
Curium-242	-2.0E-02	1	UI			GP							pCi/L
Curium-243/244	1.9E-01	1	UI			GP							pCi/L
Curium-245/246	-1.1E-01	1	UI			GP							pCi/L
Gross alpha	4.7E+00	1				GP	7.7E+00	1				GP	pCi/L
Iodine-129	2.4E+00	1				GP							pCi/L
Nickel-63	2.2E+00		UI										pCi/L
Nonvolatile beta	8.2E+01	1		■		GP	7.5E+01	1		■		GP	pCi/L
Plutonium-238	2.9E-01	1	UJI			GP							pCi/L
Plutonium-239/240	1.1E-01	1	UI			GP							pCi/L
Radium-226	1.7E+00	1				GP							pCi/L
Radium-228	3.3E+00	1				GP							pCi/L
Strontium-90	3.0E-01	1	UI			GP							pCi/L
Technetium-99	2.1E+02	1		■		GP							pCi/L
Thorium-228	-1.4E-01	1	UI			GP							pCi/L
Thorium-230	-2.9E-02	1	UI			GP							pCi/L
Thorium-232	0.0E+00	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	4.9E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	5.0E+00												pCi/L
Tritium	4.3E+03	1		■		GP	2.9E+03	1		■		GP	pCi/mL
Uranium-233/234	3.0E-01	1	UI			GP							pCi/L
Uranium-235	1.6E-01	1	UI			GP							pCi/L
Uranium-238	3.2E-01	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB 71

<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>
N72875.9 E55279.2	33.277148 °N 81.662799 °W	234.8-204.8 ft msl	241.4 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/17/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.7	222.9	ft msl
pH	5.0	4.3	pH
Sp. conductance	28	27	µS/cm
Water temperature	20.0	18.7	°C
Alkalinity as CaCO ₃	1	3	mg/L
Turbidity	3	2	NTU
Volumes purged	5.6	4.3	well volumes
Sampling code			
Synchronous water level	219.8 (09/11/97)	216.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.24	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	230	1	V			GE	1,200	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 71 (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.1E-01	1	UI			GP	-2.0E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.6E-01	1	UI			GP	9.2E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.1E+01	1		■		GP	8.2E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 71C

<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>
N72866.6 E55281.5	33.277131 °N 81.662775 °W	181.9-171.9 ft msl	241.6 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/18/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.5	219.2	ft msl
pH	6.0	5.8	pH
Sp. conductance	240	240	µS/cm
Water temperature	19.0	17.0	°C
Alkalinity as CaCO ₃	14	14	mg/L
Turbidity	3	3	NTU
Volumes purged	0.094	0.032	well volumes
Sampling code	XN	XN	
Synchronous water level	219.0 (09/11/97)	221.7 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.14	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	25,000	20	V	■		GE	24,000	20	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 71C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	6.8E+00	1				GP	1.1E+01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.8E+01	1				GP	6.0E+01	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.1E+03	1		■		GP	2.9E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 83A

<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>
N71648.6 E58606.1	33.279861 °N 81.651655 °W	76.0-65.2 ft msl	237.3 ft msl	4" PVC	S	M. Congaree (IIA)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	172.8	173.9	ft msl
pH	6.4	6.7	pH
Sp. conductance	140	190	µS/cm
Water temperature	20.0	20.1	°C
Alkalinity as CaCO ₃	28	91	mg/L
Turbidity	2	1	NTU
Volumes purged	2.4	3.0	well volumes
Sampling code			
Synchronous water level	172.5 (09/11/97)	173.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	10	1	JE			GE	20	1	JE			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 83A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>5.2E-02</i>	1	UI			GP	8.4E-01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>6.2E-02</i>	1	UI			GP	1.7E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>-7.5E-02</i>	1	UI			GP	6.2E+00	1	V			TM	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 83B

<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>
N71639.6 E58594.9	33.279823 °N 81.651667 °W	132.1-121.2 ft msl	237 ft msl	4" PVC	S	McBean (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.8	221.5	ft msl
pH	6.6	6.3	pH
Sp. conductance	100	155	µS/cm
Water temperature	21.0	21.9	°C
Alkalinity as CaCO ₃	27	49	mg/L
Turbidity	2	0	NTU
Volumes purged	3.0	2.4	well volumes
Sampling code			
Synchronous water level	221.3 (09/11/97)	222.6 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.33	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	30	1	JE			GE	60	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 83B (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>8.6E-01</i>	1	UI			GP	<i>2.7E-01</i>	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>1.9E+00</i>	1				GP	<i>6.3E-01</i>	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>1.2E+00</i>	1	UIV			GP	<i>1.1E+00</i>	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 83C

<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>
N71636.9 E58614.8	33.279849 °N 81.651609 °W	171.2-160.2 ft msl	237.1 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	203.1	223.2	ft msl
pH	4.8	5.1	pH
Sp. conductance	30	22	µS/cm
Water temperature	19.0	20.8	°C
Alkalinity as CaCO ₃	2	3	mg/L
Turbidity	2	1	NTU
Volumes purged	3.2	3.0	well volumes
Sampling code			
Synchronous water level	223.1 (09/11/97)	224.55 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	50	1	JE			GE	60	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

Notes: Radionuclide results in italics are less than sample quantitation limit.
 ● = exceeded holding time
 ■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL HSB 83C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	9.8E-01	1				GP	2.4E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.7E+00	1				GP	6.8E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.4E-01	1	UI			GP	5.9E-01	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 83D

<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>
N71628.1 E58601.7	33.279809 °N 81.651627 °W	228.7-198.7 ft msl	237 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	223.4	223.0	ft msl
pH	4.4	5.0	pH
Sp. conductance	94	71	µS/cm
Water temperature	18.0	21.8	°C
Alkalinity as CaCO ₃	1	4	mg/L
Turbidity	3	4	NTU
Volumes purged	3.6	3.5	well volumes
Sampling code			
Synchronous water level	222.7 (09/11/97)	224.9 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.14	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,300	5				GE	4,000	3				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 83D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.6E+00	1				GP	1.8E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.0E+01	1				GP	1.3E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.9E+02	1	V	■		GP	1.7E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 84A

<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>
N71586.2 E56359.1	33.276057 °N 81.657450 °W	75.9-64.7 ft msl	228.7 ft msl	4" PVC	V	L. Congaree (IIA)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	171.0	170.9	ft msl
pH	5.8	5.8	pH
Sp. conductance	100	100	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	2	34	mg/L
Turbidity	2	1	NTU
Volumes purged	0.54	2.2	well volumes
Sampling code			
Synchronous water level	171.1 (09/11/97)	171.72 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	20	1	JE			GE	<50	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 84A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.9E-01	1	UI			GP	2.3E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.9E+01	1				GP	2.1E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	6.0E+00	1				GP	4.1E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 84B

<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>
N71603.3 E56352.4	33.276084 °N 81.657501 °W	132.9-121.8 ft msl	228.9 ft msl	4" PVC	S	McBean (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	209.8	209.2	ft msl
pH	6.0	7.6	pH
Sp. conductance	120	160	µS/cm
Water temperature	24.0	24.0	°C
Alkalinity as CaCO ₃	27	72	mg/L
Turbidity	3	1	NTU
Volumes purged	0.017	0.017	well volumes
Sampling code	XN	XN	
Synchronous water level	209.3 (09/11/97)	210.52 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,300	1				GE	810	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 84B (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.3E-01	1	UI			GP	1.4E+00	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	6.3E+00	1				GP	6.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.7E+01	1		■		GP	2.9E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 84C

<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>
N71597.1 E56360.1	33.276083 °N 81.657469 °W	181.8-170.9 ft msl	229.1 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	212.5	212.1	ft msl
pH	8.2	6.0	pH
Sp. conductance	90	78	µS/cm
Water temperature	24.0	23.0	°C
Alkalinity as CaCO ₃	28	19	mg/L
Turbidity	3	3	NTU
Volumes purged	0.037	0.037	well volumes
Sampling code	XN	XN	
Synchronous water level	212.0 (09/11/97)	213.2 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.13	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,800	2				GE	2,800	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 84C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	-1.4E-01	1	UI			GP	1.3E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	4.5E+00	1				GP	3.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.4E+02	1		■		GP	4.3E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 84D

<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>
N71583.9 E56349.9	33.276037 °N 81.657470 °W	219.5-199.5 ft msl	228.8 ft msl	4" PVC	V	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	217.5	217.0	ft msl
pH	4.0	3.8	pH
Sp. conductance	52	48	µS/cm
Water temperature	19.0	23.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	4.9	7.0	well volumes
Sampling code			
Synchronous water level	217.0 (09/11/97)	218.27 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1	J			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	5.6	1				GE							µg/L
Cadmium, total recoverable	0.22	1	JE			GE							µg/L
Chromium, total recoverable	2.6	1	JE			GE							µg/L
Cobalt, total recoverable	0.71	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	50	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.22	1				GE	0.17	1	JE			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,000	2				GE	2,300	3				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	8.9	1				GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 84D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	-1.1E-02	1	UI			GP							pCi/L
Carbon-14	1.6E+01	1	UI			GP							pCi/L
Cobalt-60	5.2E+00	1				GP							pCi/L
Curium-242	1.0E-02	1	UI			GP							pCi/L
Curium-243/244	-1.6E-02	1	UI			GP							pCi/L
Curium-245/246	3.0E-02	1	UI			GP							pCi/L
Gross alpha	4.3E+00	1				GP	3.6E+00	1				GP	pCi/L
Iodine-129	6.7E-01	1	UI			GP							pCi/L
Nickel-63	5.2E+00												pCi/L
Nonvolatile beta	2.7E+02	1		■		GP	1.4E+02	1		■		GP	pCi/L
Plutonium-238	3.3E-01	1	UJIV			GP							pCi/L
Plutonium-239/240	6.0E-02	1	UI			GP							pCi/L
Radium-226	2.2E+00	1				GP							pCi/L
Radium-228	7.4E+00	1	V	■		GP							pCi/L
Strontium-90	1.4E+02	1		■		GP							pCi/L
Technetium-99	-2.0E+01	1	UI			GP							pCi/L
Thorium-228	7.4E-02	1	UI			GP							pCi/L
Thorium-230	3.1E-01	1	UIV			GP							pCi/L
Thorium-232	2.1E-01	1				GP							pCi/L
Total alpha emitters	1.0E+00												pCi/L
Total beta emitters	1.5E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	9.6E+00			■									pCi/L
Tritium	2.1E+02	1		■		GP	1.8E+02	1		■		GP	pCi/mL
Uranium-233/234	4.5E-01	1				GP							pCi/L
Uranium-235	9.0E-02	1				GP							pCi/L
Uranium-238	3.0E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL 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	07/08/97	10/14/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	169.0	168.3	ft msl
pH	6.4	6.5	pH
Sp. conductance	140	175	µS/cm
Water temperature	20.0	20.9	°C
Alkalinity as CaCO ₃	26	80	mg/L
Turbidity	0	0	NTU
Volumes purged	2.7	2.7	well volumes
Sampling code			
Synchronous water level	168.0 (09/11/97)	168.7 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable							<4.6	1	V			GE	µg/L
Arsenic, total recoverable							<5.0	1				GE	µg/L
Barium, total recoverable							34	1	V			GE	µg/L
Cadmium, total recoverable	0.64	1	JE			WA	<5.0	1				GE	µg/L
Chromium, total recoverable							<3.5	1	V			GE	µg/L
Cobalt, total recoverable													
Copper, total recoverable							<6.3	1	V			GE	µg/L
Cyanide													
Lead, total recoverable	1.4	1	JE			GE	<5.0	1				GE	µg/L
Mercury, total recoverable	0.14	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable							<5.0	1				GE	µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	10	1	JE			GE	100	1	V			GE	µg/L
Selenium, total recoverable							<5.0	1				GE	µg/L
Silver, total recoverable							<5.0	1				GE	µg/L
Tin, total recoverable							<10	1				GE	µg/L
Vanadium, total recoverable													
Zinc, total recoverable							2.9	1	JE			GE	µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 85A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14							-1.3E+01	1	UI			GP	pCi/L
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.8E+00	1				TM	8.1E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.9E+00	1				TM	1.2E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium, total alpha-emitting							2.0E-01	1	UJI			GP	pCi/L
Radium-226													
Radium-228													
Strontium-90							4.5E-02	1	UI			GP	pCi/L
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	-9.0E-02	1	UI			TM	-3.6E-01	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 85B

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N73789.3 E58953.3	33.285162 °N 81.654898 °W	143.2-133.2 ft msl	294.5 ft msl	4" PVC	S	McBean (IIB1)

SAMPLE DATE	07/08/97	10/14/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	231.5	211.1	ft msl
pH	8.4	9.8	pH
Sp. conductance	260	310	µS/cm
Water temperature	26.0	22.4	°C
Alkalinity as CaCO ₃	89	106	mg/L
Turbidity	2	1	NTU
Volumes purged	0.016	0.039	well volumes
Sampling code	XN	XN	
Synchronous water level	230.9 (09/11/97)	231.5 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable							<2.7	1	V			GE	µg/L
Arsenic, total recoverable							3.9	1	JE			GE	µg/L
Barium, total recoverable							26	1	V			GE	µg/L
Cadmium, total recoverable							<0.34	1	V			GE	µg/L
Chromium, total recoverable							<5.0	1	V			GE	µg/L
Cobalt, total recoverable													
Copper, total recoverable							<6.9	1	V			GE	µg/L
Cyanide													
Lead, total recoverable							1.2	1	JE			GE	µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable							<5.0	1				GE	µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	670	1				GE	60	1	V			GE	µg/L
Selenium, total recoverable							<5.0	1				GE	µg/L
Silver, total recoverable							<5.0	1				GE	µg/L
Tin, total recoverable							<10	1				GE	µg/L
Vanadium, total recoverable													
Zinc, total recoverable							8.5	1				GE	µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene							<1.0	1				GE	µg/L
Bis(2-ethylhexyl) phthalate													
Dichloromethane							<1.4	1	V			GE	µg/L
Tetrachloroethylene							<1.0	1				GE	µg/L
Trichloroethylene							<1.0	1				GE	µg/L
Trichlorofluoromethane							<1.0	1				GE	µg/L

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

● = exceeded holding time

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

WELL HSB 85B (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14							<i>-2.2E+01</i>	1	UI			GP	pCi/L
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+00	1				GP	1.4E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.8E+00	1				GP	<i>8.9E-01</i>	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium, total alpha-emitting							<i>1.0E-01</i>	1	UJI			GP	pCi/L
Radium-226													
Radium-228													
Strontium-90							<i>-2.5E-01</i>	1	UI			GP	pCi/L
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.9E+00	1				GP	<i>-3.2E-01</i>	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 85C

<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>
N73802.3 E58947.4	33.285182 °N 81.654939 °W	224.2-214.2 ft msl	294.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/08/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	234.9	236.7	ft msl
pH	4.6	4.1	pH
Sp. conductance	32	35	µS/cm
Water temperature	21.0	22.4	°C
Alkalinity as CaCO ₃	2	0	mg/L
Turbidity	0	0	NTU
Volumes purged	4.1	3.7	well volumes
Sampling code			
Synchronous water level	236.6 (09/11/97)	237.0 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable							<3.1	1	V			GE	µg/L
Arsenic, total recoverable							<5.0	1				GE	µg/L
Barium, total recoverable							10	1	V			GE	µg/L
Cadmium, total recoverable							<5.0	1				GE	µg/L
Chromium, total recoverable							<2.9	1	V			GE	µg/L
Cobalt, total recoverable													
Copper, total recoverable							120	1	V			GE	µg/L
Cyanide													
Lead, total recoverable							2.0	1	JE			GE	µg/L
Mercury, total recoverable	0.17	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable							<5.0	1				GE	µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,500	3				GE	2,300	5	V			GE	µg/L
Selenium, total recoverable							<5.0	1				GE	µg/L
Silver, total recoverable							<5.0	1				GE	µg/L
Tin, total recoverable							<10	1				GE	µg/L
Vanadium, total recoverable													
Zinc, total recoverable							5.4	1				GE	µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene							<1.0	1				GE	µg/L
Bis(2-ethylhexyl) phthalate													
Dichloromethane							<0.99	1	V			GE	µg/L
Tetrachloroethylene							<1.0	1				GE	µg/L
Trichloroethylene							<1.0	1				GE	µg/L
Trichlorofluoromethane							<1.0	1				GE	µg/L

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

● = exceeded holding time

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

WELL HSB 85C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14							7.7E+00	1	UI			GP	pCi/L
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.8E+00	1				GP	2.2E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.8E+00	1				GP	2.2E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium, total alpha-emitting							9.0E-01	1	J			GP	pCi/L
Radium-226													
Radium-228													
Strontium-90							7.8E-01	1	UI			GP	pCi/L
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.0E+01	1				GP	7.9E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 86A

<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>
N72520.2 E55985.9	33.277514 °N 81.660247 °W	73.9-63.1 ft msl	262.4 ft msl	4" PVC	S	L. Congaree (IIA)

SAMPLE DATE	07/14/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	168.5	168.1	ft msl
pH	6.4	6.3	pH
Sp. conductance	100	150	µS/cm
Water temperature	21.0	21.3	°C
Alkalinity as CaCO ₃	36	41	mg/L
Turbidity	1	0	NTU
Volumes purged	2.3	2.3	well volumes
Sampling code			
Synchronous water level	169.1 (09/11/97)	168.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	1.1	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<30	1	V			GE	20	1	JE			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 86A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.4E+00	1				GP	1.6E+00	1	J			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.6E+00	1				GP	4.4E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.4E+00	1				GP	7.4E-01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 86B

<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>
N72519.0 E55976.9	33.277497 °N 81.660269 °W	124.0-113.8 ft msl	261.9 ft msl	4" PVC	S	McBean (IIB1)

SAMPLE DATE	07/15/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.0	218.7	ft msl
pH	6.4	6.9	pH
Sp. conductance	160	195	µS/cm
Water temperature	21.0	21.5	°C
Alkalinity as CaCO ₃	26	117	mg/L
Turbidity	1	1	NTU
Volumes purged	2.4	2.5	well volumes
Sampling code			
Synchronous water level	221.0 (09/11/97)	220.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<40	1	V			GE	50	1	JE			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 86B (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>9.2E-01</i>	1	UI			GP	<i>1.5E+00</i>	1	J			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>5.9E-01</i>	1	UI			GP	<i>3.9E+01</i>	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>2.6E-01</i>	1	UI			GP	<i>4.1E-01</i>	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 86C

<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>
N72529.7 E55984.6	33.277533 °N 81.660269 °W	199.4-189.4 ft msl	262.9 ft msl	4" PVC	V	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.7	219.9	ft msl
pH	4.4	4.2	pH
Sp. conductance	340	360	µS/cm
Water temperature	21.0	23.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	4.3	3.2	well volumes
Sampling code			
Synchronous water level	222.0 (09/11/97)	221.72 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	1.1	1				GE	0.55	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	42,000	40	V	■		GE	30,000	20	J	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 86C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	4.8E+01	1		■		GP	4.8E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	8.4E+02	1		■		GP	3.1E+03	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.0E+04	1		■		GP	3.5E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB 86D

<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>
N72522.1 E55996.5	33.277536 °N 81.660223 °W	236.6-206.6 ft msl	263 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	222.4	220.7	ft msl
pH	3.6	3.6	pH
Sp. conductance	280	280	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	1	NTU
Volumes purged	4.6	6.5	well volumes
Sampling code			
Synchronous water level	221.9 (09/11/97)	221.65 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.34	1				GE	1.4	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	33,000	20		■		GE	42,000	40		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB 86D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	6.2E+01	1		■		GP	4.0E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.5E+03	1		■		GP	9.6E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.2E+03	1		■		GP	1.0E+04	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB100C

<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>
N72077.2 E58806.5	33.281136 °N 81.651960 °W	163.0-153.0 ft msl	260.2 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/18/97	10/13/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	225.7	225.1	ft msl
pH	5.2	5.1	pH
Sp. conductance	28	29	µS/cm
Water temperature	21.0	21.1	°C
Alkalinity as CaCO ₃	7	6	mg/L
Turbidity	1	1	NTU
Volumes purged	2.3	2.7	well volumes
Sampling code			
Synchronous water level	224.8 (09/11/97)	226.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	<3.0	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	1.6	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	150	1	V			GE	210	1				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<5.0	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB100C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.7E-01	1	UI			GP							pCi/L
Carbon-14	-1.9E+00	1	UI			GP							pCi/L
Cobalt-60	-7.2E-01	1	UI			GP							pCi/L
Curium-242	4.1E-02	1	UI			GP							pCi/L
Curium-243/244	3.0E-01	1	UI			GP							pCi/L
Curium-245/246	3.3E-02	1	UI			GP							pCi/L
Gross alpha	2.3E-01	1	UI			GP	1.2E+00	1	UI			GP	pCi/L
Iodine-129	3.3E-01	1	UJI			GP							pCi/L
Nickel-63	-7.2E-01		UI										pCi/L
Nonvolatile beta	9.2E-01	1	UI			GP	2.1E+00	1				GP	pCi/L
Plutonium-238	4.8E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-1.9E-02	1	UI			GP							pCi/L
Radium-226	1.8E-01	1	UI			GP							pCi/L
Radium-228	1.7E+00	1				GP							pCi/L
Strontium-90	-6.5E-01	1	UI			GP							pCi/L
Technetium-99	-3.2E+00	1	UI			GP							pCi/L
Thorium-228	-5.0E-02	1	UI			GP							pCi/L
Thorium-230	6.3E-02	1	UI			GP							pCi/L
Thorium-232	3.6E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	1.7E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.7E+00												pCi/L
Tritium	7.3E-01	1				GP	1.1E+00	1				GP	pCi/mL
Uranium-233/234	1.5E-01	1	UI			GP							pCi/L
Uranium-235	1.5E-01	1	UI			GP							pCi/L
Uranium-238	1.9E-01	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB100D

<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>
N72073.8 E58796.9	33.281113 °N 81.651978 °W	236.9-216.9 ft msl	260.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/21/97	10/13/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	232.3	231.7	ft msl
pH	4.6	4.6	pH
Sp. conductance	84	84	µS/cm
Water temperature	22.1	21.3	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	3	NTU
Volumes purged	2.6	0.21	well volumes
Sampling code		XN	
Synchronous water level	231.6 (09/11/97)	233.5 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	31	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	1.1	1	JE			GE							µg/L
Copper, total recoverable	40	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	7.7	1	V			GE							µg/L
Mercury, total recoverable	0.28	1				GE	0.19	1	JE			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	6,800	5				GE	6,400	10				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	30	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<11	1				GE							µg/L
Dichloromethane	<3.1	1	V			GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB100D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.7E-01	1	UI			GP							pCi/L
Carbon-14	-1.1E+00	1	UI			GP							pCi/L
Cobalt-60	-1.7E+00	1	UI			GP							pCi/L
Curium-242	-2.9E-02	1	UI			GP							pCi/L
Curium-243/244	2.4E-01	1	UI			GP							pCi/L
Curium-245/246	4.2E-02	1	UI			GP							pCi/L
Gross alpha	2.5E+00	1				GP	6.9E+00	1				GP	pCi/L
Iodine-129	4.3E-02	1	UJI			GP							pCi/L
Nickel-63	-1.7E+00		UI										pCi/L
Nonvolatile beta	5.1E+01	1		■		GP	7.7E+01	1		■		GP	pCi/L
Plutonium-238	2.7E-01	1	UJI			GP							pCi/L
Plutonium-239/240	8.2E-02	1	UI			GP							pCi/L
Radium-226	2.1E+00	1				GP							pCi/L
Radium-228	2.0E+00	1				GP							pCi/L
Strontium-90	3.2E+01	1		■		GP							pCi/L
Technetium-99	1.4E+01	1				GP							pCi/L
Thorium-228	3.3E-01	1	UI			GP							pCi/L
Thorium-230	-4.0E-02	1	UI			GP							pCi/L
Thorium-232	-1.3E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	4.8E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	4.2E+00												pCi/L
Tritium	1.3E+02	1		■		GP	1.2E+02	1		■		GP	pCi/mL
Uranium-233/234	2.0E-01	1	UI			GP							pCi/L
Uranium-235	3.7E-02	1	UI			GP							pCi/L
Uranium-238	8.6E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB101C

<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>
N72001.9 E58604.4	33.280640 °N 81.652346 °W	176.3-166.3 ft msl	258.5 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/21/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	224.2	223.8	ft msl
pH	5.4	5.5	pH
Sp. conductance	38	35	µS/cm
Water temperature	21.0	20.9	°C
Alkalinity as CaCO ₃	25	8	mg/L
Turbidity	1	1	NTU
Volumes purged	2.6	2.4	well volumes
Sampling code			
Synchronous water level	223.5 (09/11/97)	225.05 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	12	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	2.2	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	1.5	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	900	1				GE	840	1				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.52	1	JE			GE							µg/L
Zinc, total recoverable	<8.1	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	430	4		■		GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB101C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.5E-02	1	UI			GP							pCi/L
Carbon-14	-3.0E+00	1	UI			GP							pCi/L
Cobalt-60	1.7E+00	1	UI			GP							pCi/L
Curium-242	-7.3E-03	1	UI			GP							pCi/L
Curium-243/244	8.2E-02	1	UI			GP							pCi/L
Curium-245/246	5.6E-02	1	UI			GP							pCi/L
Gross alpha	1.2E+00	1				GP	1.9E-02	1	UJI			GP	pCi/L
Iodine-129	4.7E-01	1	UJI			GP							pCi/L
Nickel-63	1.7E+00		UI										pCi/L
Nonvolatile beta	2.3E+00	1				GP	6.6E+00	1				GP	pCi/L
Plutonium-238	4.6E-01	1	UJI			GP							pCi/L
Plutonium-239/240	1.3E-01	1	UI			GP							pCi/L
Radium-226	1.8E-01	1	UI			GP							pCi/L
Radium-228	5.8E-01	1	UI			GP							pCi/L
Strontium-90	-1.5E-01	1	UJI			GP							pCi/L
Technetium-99	-7.5E+00	1	UI			GP							pCi/L
Thorium-228	1.8E-01	1	UI			GP							pCi/L
Thorium-230	-2.6E-02	1	UI			GP							pCi/L
Thorium-232	2.5E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	1.0E+01	1				GP	9.9E+00	1				GP	pCi/mL
Uranium-233/234	1.4E-01	1	UI			GP							pCi/L
Uranium-235	4.6E-02	1	UI			GP							pCi/L
Uranium-238	3.7E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB101D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71997.5 E58594.8	33.280614 °N 81.652362 °W	236.1-216.1 ft msl	258.7 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/18/97	10/20/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	229.2	228.5	ft msl
pH	7.0	8.8	pH
Sp. conductance	68	680	µS/cm
Water temperature	21.0	18.0	°C
Alkalinity as CaCO ₃	7	88	mg/L
Turbidity	1	1	NTU
Volumes purged	0.12	0.0	well volumes
Sampling code	XN	XN	
Synchronous water level	230.2 (09/11/97)	230.35 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	26	1				GE							µg/L
Barium, total recoverable	1.0	1	JE			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	3.9	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.9	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	0.84	1	JE			GE							µg/L
Mercury, total recoverable	2.4	1		■		GE	3.1	1	V	■		GE	µg/L
Nickel, total recoverable	2.3	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	42,000	40	V	■		GE	34,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	90	1		■		GE							µg/L
Zinc, total recoverable	<11	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB101D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.3E-01	1	UI			GP	pCi/L							
Carbon-14	1.1E+03	1		■		GP	pCi/L							
Cobalt-60	1.6E+00	1	UI			GP	pCi/L							
Curium-242	-4.9E-02	1	UI			GP	pCi/L							
Curium-243/244	-1.2E-01	1	UI			GP	pCi/L							
Curium-245/246	-3.5E-02	1	UI			GP	pCi/L							
Gross alpha	3.5E+00	1				GP	pCi/L	1.4E+01	1				GP	pCi/L
Iodine-129	9.9E+00	1				GP	pCi/L							
Nickel-63	1.6E+00		UI				pCi/L							
Nonvolatile beta	8.4E+00	1				GP	pCi/L	4.1E+01	1				GP	pCi/L
Plutonium-238	3.6E-02	1	UJ1			GP	pCi/L							
Plutonium-239/240	-3.7E-02	1	UJ13			GP	pCi/L							
Radium-226	3.3E-01	1	UI			GP	pCi/L							
Radium-228	3.8E-01	1	UI			GP	pCi/L							
Strontium-90	5.7E+00	1				GP	pCi/L							
Technetium-99	1.0E+02	1		■		GP	pCi/L							
Thorium-228	-1.1E-01	1	UI			GP	pCi/L							
Thorium-230	6.0E-02	1	UI			GP	pCi/L							
Thorium-232	0.0E+00	1	UI			GP	pCi/L							
Total alpha emitters	1.1E+01						pCi/L							
Total beta emitters	1.2E+03			■			pCi/L							
Tritium	5.7E+03	1		■		GP	pCi/mL	4.7E+03	1		■		GP	pCi/mL
Uranium-233/234	5.6E+00	1				GP	pCi/L							
Uranium-235	3.4E-01	1				GP	pCi/L							
Uranium-238	5.0E+00	1				GP	pCi/L							

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

● = exceeded holding time

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

WELL HSB102C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71960.1 E58399.7	33.280213 °N 81.652803 °W	176.7-166.7 ft msl	259 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/21/97	10/09/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	223.4	223.0	ft msl
pH	5.8	5.8	pH
Sp. conductance	180	185	µS/cm
Water temperature	20.0	20.7	°C
Alkalinity as CaCO ₃	10	11	mg/L
Turbidity	1	1	NTU
Volumes purged	4.1	2.5	well volumes
Sampling code			
Synchronous water level	222.8 (09/11/97)	224.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	33	1	V			GE							µg/L
Cadmium, total recoverable	0.37	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	2.2	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<1.0	1	V			GE							µg/L
Mercury, total recoverable	0.56	1				GE	0.64	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	32,000	20		■		GE	15,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	20	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB102C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.8E-01	1	UI			GP							pCi/L
Carbon-14	1.5E+00	1	UI			GP							pCi/L
Cobalt-60	8.0E-01	1	UI			GP							pCi/L
Curium-242	3.8E-02	1	UI			GP							pCi/L
Curium-243/244	2.4E-02	1	UI			GP							pCi/L
Curium-245/246	5.1E-02	1	UI			GP							pCi/L
Gross alpha	3.7E+00	1				GP	4.4E+00	1	J			GP	pCi/L
Iodine-129	1.7E+00	1	J			GP							pCi/L
Nickel-63	8.0E-01		UI										pCi/L
Nonvolatile beta	7.3E+00	1				GP	7.0E+00	1				GP	pCi/L
Plutonium-238	5.5E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-5.5E-02	1	UI			GP							pCi/L
Radium-226	9.3E-01	1	UI			GP							pCi/L
Radium-228	1.2E+00	1				GP							pCi/L
Strontium-90	4.8E-01	1	UI			GP							pCi/L
Technetium-99	3.7E+00	1	UI			GP							pCi/L
Thorium-228	-1.1E-01	1	UI			GP							pCi/L
Thorium-230	4.0E-02	1	UI			GP							pCi/L
Thorium-232	2.0E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	2.9E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.2E+00												pCi/L
Tritium	1.6E+02	1		■		GP	1.5E+02	1		■		GP	pCi/mL
Uranium-233/234	1.6E-01	1	UI			GP							pCi/L
Uranium-235	3.4E-02	1	UI			GP							pCi/L
Uranium-238	1.0E-01	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB102D

<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>
N71952.4 E58393.4	33.280186 °N 81.652805 °W	236.3-216.3 ft msl	258.6 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	226.7	226.4	ft msl
pH	3.2	3.4	pH
Sp. conductance	220	220	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	7	19	NTU
Volumes purged	0.15	0.75	well volumes
Sampling code	XN	XN	
Synchronous water level	226.3 (09/11/97)	227.9 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	26	1	V			GE							µg/L
Cadmium, total recoverable	1.1	5	JEV			GE							µg/L
Chromium, total recoverable	1.9	1	JE			GE							µg/L
Cobalt, total recoverable	2.2	1	JE			GE							µg/L
Copper, total recoverable	11	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	9.0	1	V			GE							µg/L
Mercury, total recoverable	5.6	1		■		GE	3.9	1		■		GE	µg/L
Nickel, total recoverable	8.6	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	20,000	20		■		GE	20,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	5.4	5	JEV			GE							µg/L
Tin, total recoverable	<6.8	1	V			GE							µg/L
Vanadium, total recoverable	<0.84	1	V			GE							µg/L
Zinc, total recoverable	50	5	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB102D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.4E-01	1	UI			GP							pCi/L
Carbon-14	1.9E+02	1		■		GP							pCi/L
Cobalt-60	2.7E+01	1				GP							pCi/L
Curium-242	-8.8E-03	1	UI			GP							pCi/L
Curium-243/244	1.1E-01	1	UI			GP							pCi/L
Curium-245/246	6.1E-02	1	UI			GP							pCi/L
Gross alpha	4.3E+01	1		■		GP	1.5E+02	1		■		GP	pCi/L
Iodine-129	3.3E+00	1				GP							pCi/L
Nickel-63	2.7E+01												pCi/L
Nonvolatile beta	6.1E+02	1		■		GP	2.3E+03	1		■		GP	pCi/L
Plutonium-238	1.3E-01	1	UJI			GP							pCi/L
Plutonium-239/240	3.8E-02	1	UI			GP							pCi/L
Radium-226	4.6E+00	1				GP							pCi/L
Radium-228	5.7E+01	1		■		GP							pCi/L
Strontium-90	9.2E+02	1		■		GP							pCi/L
Technetium-99	5.4E+01	1	J	■		GP							pCi/L
Thorium-228	4.0E-02	1	UI			GP							pCi/L
Thorium-230	9.6E-01	1	UIV			GP							pCi/L
Thorium-232	7.3E-02	1	UI			GP							pCi/L
Total alpha emitters	7.2E+01			■									pCi/L
Total beta emitters	1.3E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	6.1E+01			■									pCi/L
Tritium	2.4E+03	1		■		GP	1.6E+03	1		■		GP	pCi/mL
Uranium-233/234	3.4E+01	1		■		GP							pCi/L
Uranium-235	2.5E+00	1				GP							pCi/L
Uranium-238	3.6E+01	1		■		GP							pCi/L

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

● = exceeded holding time

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

WELL HSB103C

<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>
N71593.9 E58323.6	33.279279 °N 81.652293 °W	169.2-159.2 ft msl	247.4 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/21/97	10/08/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	222.4	222.0	ft msl
pH	4.6	4.9	pH
Sp. conductance	180	195	µS/cm
Water temperature	22.0	20.6	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.2	2.0	well volumes
Sampling code			
Synchronous water level	221.5 (09/11/97)	223.15 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	63	1	V			GE							µg/L
Cadmium, total recoverable	0.74	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	13	1		■		GE							µg/L
Copper, total recoverable	3.2	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<1.3	1	V			GE							µg/L
Mercury, total recoverable	1.4	1				GE	1.8	1				GE	µg/L
Nickel, total recoverable	3.7	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	20,000	10		■		GE	19,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.52	1	JE			GE							µg/L
Zinc, total recoverable	24	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB103C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.9E-02	1	UI			GP							pCi/L
Carbon-14	-1.5E+00	1	UI			GP							pCi/L
Cobalt-60	8.2E-01	1	UI			GP							pCi/L
Curium-242	9.1E-04	1	UI			GP							pCi/L
Curium-243/244	-4.1E-02	1	UI			GP							pCi/L
Curium-245/246	3.5E-02	1	UI			GP							pCi/L
Gross alpha	4.8E+00	1				GP	7.8E+00	1				GP	pCi/L
Iodine-129	2.0E+00	1	J			GP							pCi/L
Nickel-63	8.2E-01		UI										pCi/L
Nonvolatile beta	1.9E+01	1				GP	1.4E+01	1				GP	pCi/L
Plutonium-238	5.5E-01	1	UJI			GP							pCi/L
Plutonium-239/240	6.9E-02	1	UI			GP							pCi/L
Radium-226	1.4E+00	1				GP							pCi/L
Radium-228	1.6E+00	1				GP							pCi/L
Strontium-90	2.0E+00	1				GP							pCi/L
Technetium-99	1.8E+01	1				GP							pCi/L
Thorium-228	-3.3E-01	1	UI			GP							pCi/L
Thorium-230	4.6E-02	1	UI			GP							pCi/L
Thorium-232	-1.4E-03	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	2.4E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	3.0E+00												pCi/L
Tritium	4.8E+02	1		■		GP	5.1E+02	1		■		GP	pCi/mL
Uranium-233/234	1.6E-01	1	UI			GP							pCi/L
Uranium-235	7.4E-02	1	UI			GP							pCi/L
Uranium-238	3.2E-01	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB103D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71588.1 E58315.6	33.279253 °N 81.652302 °W	233.7-213.7 ft msl	247.6 ft msl	4" PVC	V	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	223.9	223.3	ft msl
pH	4.2	4.4	pH
Sp. conductance	140	140	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	4	3	NTU
Volumes purged	5.0	7.1	well volumes
Sampling code			
Synchronous water level	223.2 (09/11/97)	225.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable													
Cadmium, total recoverable	0.34	1	JE			GE							µg/L
Chromium, total recoverable	1.1	1	JE			GE							µg/L
Cobalt, total recoverable	1.5	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable													
Mercury, total recoverable	1.2	1				GE	1.6	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	15,000	20		■		GE	15,000	10	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable													
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<17	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB103D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.5E-01	1	UI			GP							pCi/L
Carbon-14	5.8E+01	1		■		GP							pCi/L
Cobalt-60	4.0E+00	1	UI			GP							pCi/L
Curium-242	-1.3E-02	1	UI			GP							pCi/L
Curium-243/244	1.3E-01	1	UI			GP							pCi/L
Curium-245/246	4.6E-02	1	UI			GP							pCi/L
Gross alpha	3.0E+00	1				GP	1.4E+01	1	J			GP	pCi/L
Iodine-129	1.2E+01	1				GP							pCi/L
Nickel-63	4.0E+00		UI										pCi/L
Nonvolatile beta	1.3E+02	1		■		GP	4.8E+02	1		■		GP	pCi/L
Plutonium-238	8.9E-02	1	UJI			GP							pCi/L
Plutonium-239/240	3.4E-02	1	UI			GP							pCi/L
Radium-226	3.3E+00	1	UIV			GP							pCi/L
Radium-228	1.6E+01	1		■		GP							pCi/L
Strontium-90	2.7E+02	1		■		GP							pCi/L
Technetium-99	2.9E+01	1	J			GP							pCi/L
Thorium-228	3.1E-01	1	UI			GP							pCi/L
Thorium-230	5.7E-01	1	UIV			GP							pCi/L
Thorium-232	-2.0E-02	1	UI			GP							pCi/L
Total alpha emitters	3.2E-01												pCi/L
Total beta emitters	3.9E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.6E+01			■									pCi/L
Tritium	8.9E+02	1		■		GP	7.8E+02	1		■		GP	pCi/mL
Uranium-233/234	1.8E-01	1				GP							pCi/L
Uranium-235	4.3E-02	1	UI			GP							pCi/L
Uranium-238	1.4E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB104C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71376.8 E58082.6	33.278406 °N 81.652506 °W	173.5-163.5 ft msl	247.9 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/21/97	10/14/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	219.7	219.0	ft msl
pH	9.0	8.1	pH
Sp. conductance	140	210	µS/cm
Water temperature	23.8	22.2	°C
Alkalinity as CaCO ₃	60	55	mg/L
Turbidity	1	2	NTU
Volumes purged	2.2	0.055	well volumes
Sampling code		XN	
Synchronous water level	218.9 (09/11/97)	220.4 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	5.5	1	JE			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	72	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	0.69	1	JE			GE							µg/L
Copper, total recoverable	1.6	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<1.0	1	V			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,100	5				GE	7,700	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.94	1	JE			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	1.4	1	JE			GE							µg/L
Zinc, total recoverable	<3.3	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	2.6	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB104C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.7E-02	1	UI			GP							pCi/L
Carbon-14	2.1E+00	1	UI			GP							pCi/L
Cobalt-60	4.6E-01	1	UI			GP							pCi/L
Curium-242	4.8E-03	1	UI			GP							pCi/L
Curium-243/244	1.0E-01	1	UI			GP							pCi/L
Curium-245/246	4.1E-02	1	UI			GP							pCi/L
Gross alpha	2.2E+00	1				GP	5.1E+00	1				GP	pCi/L
Iodine-129	1.0E+00	1	J			GP							pCi/L
Nickel-63	4.6E-01		UI										pCi/L
Nonvolatile beta	1.4E+01	1				GP	1.7E+01	1				GP	pCi/L
Plutonium-238	2.8E-01	1	UJI			GP							pCi/L
Plutonium-239/240	6.9E-03	1	UI			GP							pCi/L
Radium-226	9.3E-01	1				GP							pCi/L
Radium-228	4.7E-01	1	UI			GP							pCi/L
Strontium-90	4.5E+00	1				GP							pCi/L
Technetium-99	6.1E+00	1	UI			GP							pCi/L
Thorium-228	2.8E-01	1	UI			GP							pCi/L
Thorium-230	2.7E-01	1	UI			GP							pCi/L
Thorium-232	1.4E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	5.5E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	9.3E-01												pCi/L
Tritium	2.0E+02	1		■		GP	2.2E+02	1		■		GP	pCi/mL
Uranium-233/234	1.3E-01	1	UI			GP							pCi/L
Uranium-235	4.4E-02	1	UI			GP							pCi/L
Uranium-238	3.6E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB104D

<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>
N71370.2 E58075.8	33.278380 °N 81.652511 °W	230.6-210.6 ft msl	247.8 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/01/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	223.5	222.8	ft msl
pH	3.8	3.8	pH
Sp. conductance	74	100	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	4	1	NTU
Volumes purged	5.0	4.4	well volumes
Sampling code			
Synchronous water level	222.5 (09/11/97)	224.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	16	1				GE							µg/L
Cadmium, total recoverable	<5.0	1	J			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	1.2	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	3.0	1		■		GE	3.8	1		■		GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,400	3				GE	6,100	5	V			GE	µg/L
Selenium, total recoverable	<1.9	1	V			GE							µg/L
Silver, total recoverable	0.92	1	JE			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<8.5	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB104D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	8.2E-02	1	UI			GP							pCi/L
Carbon-14	1.4E+01	1				GP							pCi/L
Cobalt-60	1.7E+00	1	UI			GP							pCi/L
Curium-242	-5.7E-03	1	UI			GP							pCi/L
Curium-243/244	6.7E-02	1	UI			GP							pCi/L
Curium-245/246	3.1E-02	1	UI			GP							pCi/L
Gross alpha	1.2E+01	1				GP	1.3E+01	1	J			GP	pCi/L
Iodine-129	1.8E+00	1				GP							pCi/L
Nickel-63	1.7E+00		UI										pCi/L
Nonvolatile beta	4.0E+02	1		■		GP	9.9E+02	1		■		GP	pCi/L
Plutonium-238	2.1E-01	1	UJIV			GP							pCi/L
Plutonium-239/240	-1.1E-02	1	UI			GP							pCi/L
Radium-226	2.1E+00	1				GP							pCi/L
Radium-228	4.6E+00	1				GP							pCi/L
Strontium-90	2.4E+02	1		■		GP							pCi/L
Technetium-99	8.6E+00	1	UI			GP							pCi/L
Thorium-228	4.7E-02	1	UI			GP							pCi/L
Thorium-230	2.8E-01	1	UIV			GP							pCi/L
Thorium-232	4.2E-02	1	UI			GP							pCi/L
Total alpha emitters	6.7E-01												pCi/L
Total beta emitters	2.6E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	6.7E+00			■									pCi/L
Tritium	4.6E+02	1		■		GP	5.4E+02	1		■		GP	pCi/mL
Uranium-233/234	4.3E-01	1				GP							pCi/L
Uranium-235	-3.3E-04	1	UI			GP							pCi/L
Uranium-238	2.4E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB105C

<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>
N71447.3 E57883.8	33.278237 °N 81.653166 °W	162.2-152.2 ft msl	249.5 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/22/97	10/13/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	218.5	218.0	ft msl
pH	5.2	5.7	pH
Sp. conductance	74	78	µS/cm
Water temperature	20.0	20.2	°C
Alkalinity as CaCO ₃	10	18	mg/L
Turbidity	1	1	NTU
Volumes purged	7.0	2.4	well volumes
Sampling code			
Synchronous water level	219.4 (09/11/97)	219.35 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	7.9	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	3.5	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.0	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	0.13	1	JE			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,600	5				GE	3,600	10				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<17	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB105C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>-1.0E-01</i>	1	UI			GP							pCi/L
Carbon-14	<i>1.8E+00</i>	1	UI			GP							pCi/L
Cobalt-60	<i>5.7E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>4.8E-03</i>	1	UI			GP							pCi/L
Curium-243/244	<i>1.4E-01</i>	1	UI			GP							pCi/L
Curium-245/246	<i>-5.0E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>1.8E-01</i>	1	UI			GP	<i>7.8E-01</i>	1	UI			GP	pCi/L
Iodine-129	<i>4.6E-01</i>	1	UI			GP							pCi/L
Nickel-63	<i>5.7E-01</i>		UI										pCi/L
Nonvolatile beta	<i>1.2E+00</i>	1	UI			GP	<i>2.5E+00</i>	1				GP	pCi/L
Plutonium-238	<i>2.1E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>3.0E-02</i>	1	UI			GP							pCi/L
Radium-226	<i>-1.8E-01</i>	1	UI			GP							pCi/L
Radium-228	<i>7.0E-01</i>	1				GP							pCi/L
Strontium-90	<i>6.1E-02</i>	1	UI			GP							pCi/L
Technetium-99	<i>-3.8E+00</i>	1	UI			GP							pCi/L
Thorium-228	<i>-1.4E-01</i>	1	UI			GP							pCi/L
Thorium-230	<i>5.4E-01</i>	1	R4			GP							pCi/L
Thorium-232	<i>3.9E-02</i>	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	<i>7.0E-01</i>												pCi/L
Total radium													
(Ra-226 plus Ra-228)	<i>7.0E-01</i>												pCi/L
Tritium	<i>9.0E+01</i>	1		■		GP	<i>8.9E+01</i>	1		■		GP	pCi/mL
Uranium-233/234	<i>-6.2E-02</i>	1	UI			GP							pCi/L
Uranium-235	<i>1.9E-01</i>	1	UI			GP							pCi/L
Uranium-238	<i>2.8E-02</i>	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB105D

<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>
N71454.8 E57877.4	33.278244 °N 81.653197 °W	231.8-211.8 ft msl	249.5 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/01/97 10/02/97

FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	223.7	223.1	ft msl
pH	3.8	3.6	pH
Sp. conductance	160	140	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	3	0	NTU
Volumes purged	6.1	4.7	well volumes
Sampling code			
Synchronous water level	224.0 (09/11/97)	225.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	33	1				GE							µg/L
Cadmium, total recoverable	0.43	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	8.2	1		■		GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	2.2	1		■		GE	3.0	1	J	■		GE	µg/L
Nickel, total recoverable	4.2	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	18,000	15		■		GE	5,900	10	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	58	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB105D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	4.6E-03	1	UI			GP							pCi/L
Carbon-14	2.7E+01	1				GP							pCi/L
Cobalt-60	2.8E+01	1				GP							pCi/L
Curium-242	-1.7E-02	1	UI			GP							pCi/L
Curium-243/244	4.7E-02	1	UI			GP							pCi/L
Curium-245/246	1.6E-02	1	UI			GP							pCi/L
Gross alpha	4.4E+01	1		■		GP	1.3E+01	1	J			GP	pCi/L
Iodine-129	5.1E+00	1				GP							pCi/L
Nickel-63	2.8E+01												pCi/L
Nonvolatile beta	1.9E+03	1		■		GP	5.1E+02	1		■		GP	pCi/L
Plutonium-238	7.8E-02	1	UJI			GP							pCi/L
Plutonium-239/240	-3.4E-04	1	UI			GP							pCi/L
Radium-226	3.5E+00	1				GP							pCi/L
Radium-228	1.5E+01	1		■		GP							pCi/L
Strontium-90	1.1E+03	1		■		GP							pCi/L
Technetium-99	1.2E+01	1				GP							pCi/L
Thorium-228	8.0E-02	1	UI			GP							pCi/L
Thorium-230	4.1E-01	1	UIV			GP							pCi/L
Thorium-232	2.5E-02	1	UI			GP							pCi/L
Total alpha emitters	1.2E+00												pCi/L
Total beta emitters	1.2E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.8E+01			■									pCi/L
Tritium	9.5E+02	1		■		GP	1.1E+03	1		■		GP	pCi/mL
Uranium-233/234	7.8E-01	1				GP							pCi/L
Uranium-235	1.3E-01	1				GP							pCi/L
Uranium-238	2.9E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB106C

<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>
N71720.9 E57651.5	33.278464 °N 81.654309 °W	168.7-158.7 ft msl	252.9 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/22/97	10/08/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.4	219.9	ft msl
pH	5.2	5.1	pH
Sp. conductance	70	72	µS/cm
Water temperature	20.0	20.4	°C
Alkalinity as CaCO ₃	1	3	mg/L
Turbidity	1	0	NTU
Volumes purged	2.3	2.5	well volumes
Sampling code			
Synchronous water level	221.7 (09/11/97)	221.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<1.7	1	V			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	16	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	1.3	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.2	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.42	1				GE	0.76	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	6,500	5				GE	5,400	10				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<14	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	3.3	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB106C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.2E-01	1	UI			GP							pCi/L
Carbon-14	-1.9E-01	1	UI			GP							pCi/L
Cobalt-60	5.8E-02	1	UI			GP							pCi/L
Curium-242	-4.6E-02	1	UI			GP							pCi/L
Curium-243/244	-2.0E-02	1	UI			GP							pCi/L
Curium-245/246	-1.4E-02	1	UI			GP							pCi/L
Gross alpha	1.8E-01	1	UI			GP	6.2E-01	1	UI			GP	pCi/L
Iodine-129	6.4E-01	1				GP							pCi/L
Nickel-63	5.8E-02		UI										pCi/L
Nonvolatile beta	1.8E+00	1				GP	2.1E+00	1				GP	pCi/L
Plutonium-238	2.4E-01	1	UJI			GP							pCi/L
Plutonium-239/240	0.0E+00	1	UJI3			GP							pCi/L
Radium-226	-1.5E-01	1	UI			GP							pCi/L
Radium-228	2.0E-02	1	UI			GP							pCi/L
Strontium-90	-8.5E-02	1	UI			GP							pCi/L
Technetium-99	-4.0E+00	1	UI			GP							pCi/L
Thorium-228	5.2E-02	1	UI			GP							pCi/L
Thorium-230	8.8E-02	1	UI			GP							pCi/L
Thorium-232	3.5E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	6.4E-01												
Tritium	1.8E+02	1		■		GP	1.8E+02	1		■		GP	pCi/L
Uranium-233/234	-2.8E-02	1	UI			GP							pCi/mL
Uranium-235	-1.6E-02	1	UI			GP							pCi/L
Uranium-238	-3.2E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB106D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71727.8 E57644.8	33.278468 °N 81.654340 °W	230.7-210.7 ft msl	252.9 ft msl	4" PVC	V	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	224.0	223.7	ft msl
pH	4.0	4.0	pH
Sp. conductance	90	94	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	18	NTU
Volumes purged	2.9	4.0	well volumes
Sampling code			
Synchronous water level	225.7 (09/11/97)	225.0 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	29	1				GE							µg/L
Cadmium, total recoverable	0.32	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	2.7	1	JE			GE							µg/L
Copper, total recoverable	2.9	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.21	1				GE	0.49	1	V			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	9,400	5				GE	6,100	10				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<11	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB106D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.7E-01	1				GP							pCi/L
Carbon-14	3.7E+01	1				GP							pCi/L
Cobalt-60	7.3E+00	1	R4			GP							pCi/L
Curium-242	4.7E-03	1	UI			GP							pCi/L
Curium-243/244	1.5E-01	1				GP							pCi/L
Curium-245/246	2.4E-02	1	UI			GP							pCi/L
Gross alpha	1.2E+01	1				GP	1.5E+01	1		■		GP	pCi/L
Iodine-129	9.8E-01	1				GP							pCi/L
Nickel-63	7.3E+00		R4										pCi/L
Nonvolatile beta	6.6E+02	1		■		GP	6.5E+02	1		■		GP	pCi/L
Plutonium-238	8.8E-02	1	UJI			GP							pCi/L
Plutonium-239/240	3.8E-02	1	UI			GP							pCi/L
Radium-226	1.4E+00	1				GP							pCi/L
Radium-228	1.3E+01	1		■		GP							pCi/L
Strontium-90	4.1E+02	1		■		GP							pCi/L
Technetium-99	8.4E-01	1	UI			GP							pCi/L
Thorium-228	1.7E-03	1	UI			GP							pCi/L
Thorium-230	7.1E-01	1	UIV			GP							pCi/L
Thorium-232	3.9E-02	1	UI			GP							pCi/L
Total alpha emitters	5.7E-01												pCi/L
Total beta emitters	4.6E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.4E+01			■									pCi/L
Tritium	2.5E+02	1		■		GP	2.4E+02	1		■		GP	pCi/mL
Uranium-233/234	2.4E-01	1				GP							pCi/L
Uranium-235	4.6E-02	1	UI			GP							pCi/L
Uranium-238	7.4E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB107C

<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>
N71698.5 E57432.0	33.278056 °N 81.654844 °W	169.3-159.3 ft msl	261.6 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/14/97	10/13/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	217.9	217.3	ft msl
pH	6.4	6.2	pH
Sp. conductance	120	155	µS/cm
Water temperature	22.0	21.2	°C
Alkalinity as CaCO ₃	33	28	mg/L
Turbidity	1	0	NTU
Volumes purged	2.9	2.8	well volumes
Sampling code			
Synchronous water level	219.0 (09/11/97)	218.75 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	40	1	V			GE							µg/L
Cadmium, total recoverable	0.34	1	JE			GE							µg/L
Chromium, total recoverable	1.2	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	1.7	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,000	5	V			GE	6,300	10				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<0.93	1	V			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<0.43	1	V			GE							µg/L
Zinc, total recoverable	<15	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	6.7	1		■		GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB107C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.6E-01	1	UI			GP							pCi/L
Carbon-14	4.8E+00	1	UI			GP							pCi/L
Cobalt-60	3.9E-01	1	UI			GP							pCi/L
Curium-242	3.5E-02	1	UI			GP							pCi/L
Curium-243/244	8.3E-02	1	UI			GP							pCi/L
Curium-245/246	5.0E-02	1	UI			GP							pCi/L
Gross alpha	1.1E+00	1				GP	2.6E-01	1	UI			GP	pCi/L
Iodine-129	1.1E-01	1	UJI			GP							pCi/L
Nickel-63	3.9E-01		UI										pCi/L
Nonvolatile beta	9.3E+00	1				GP	6.7E+00	1				GP	pCi/L
Plutonium-238	2.1E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-2.4E-02	1	UI			GP							pCi/L
Radium-226	2.3E-01	1	UI			GP							pCi/L
Radium-228	2.1E+00	1	UIV			GP							pCi/L
Strontium-90	-3.4E-01	1	UJI			GP							pCi/L
Technetium-99	6.7E-01	1	UI			GP							pCi/L
Thorium-228	1.2E-01	1	UI			GP							pCi/L
Thorium-230	6.6E-02	1	UI			GP							pCi/L
Thorium-232	2.4E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	2.3E+02	1		■		GP	3.4E+02	1		■		GP	pCi/mL
Uranium-233/234	3.3E-02	1	UI			GP							pCi/L
Uranium-235	7.2E-02	1	UI			GP							pCi/L
Uranium-238	-9.6E-03	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB107D

<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>
N71696.6 E57412.2	33.278019 °N 81.654892 °W	235.1-215.1 ft msl	262.3 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	223.0	222.4	ft msl
pH	4.8	4.6	pH
Sp. conductance	160	160	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	4.5	6.1	well volumes
Sampling code			
Synchronous water level	223.8 (09/11/97)	223.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	2.0	1	JE			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	31	1				GE							µg/L
Cadmium, total recoverable	0.21	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	1.6	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	2.7	1		■		GE	3.3	1	V	■		GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	19,000	15		■		GE	14,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.63	1	JE			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<8.5	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB107D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	3.3E-02	1	UI			GP							pCi/L
Carbon-14	1.8E+01	1				GP							pCi/L
Cobalt-60	1.0E+01	1				GP							pCi/L
Curium-242	-2.0E-04	1	UI			GP							pCi/L
Curium-243/244	2.8E-02	1	UI			GP							pCi/L
Curium-245/246	2.4E-02	1	UI			GP							pCi/L
Gross alpha	1.9E+01	1		■		GP	7.5E+00	1				GP	pCi/L
Iodine-129	4.5E+00	1				GP							pCi/L
Nickel-63	1.0E+01												pCi/L
Nonvolatile beta	7.9E+02	1		■		GP	1.4E+03	1		■		GP	pCi/L
Plutonium-238	1.4E-01	1	UI			GP							pCi/L
Plutonium-239/240	2.6E-02	1	UI			GP							pCi/L
Radium-226	3.0E+00	1				GP							pCi/L
Radium-228	1.7E+01	1		■		GP							pCi/L
Strontium-90	6.5E+02	1		■		GP							pCi/L
Technetium-99	4.9E+01	1				GP							pCi/L
Thorium-228	1.2E-01	1	UI			GP							pCi/L
Thorium-230	4.0E-01	1	UIV			GP							pCi/L
Thorium-232	1.5E-02	1	UI			GP							pCi/L
Total alpha emitters	2.2E-01												pCi/L
Total beta emitters	7.6E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	2.0E+01			■									pCi/L
Tritium	5.8E+02	1		■		GP	4.8E+02	1		■		GP	pCi/mL
Uranium-233/234	1.3E-01	1				GP							pCi/L
Uranium-235	9.3E-02	1				GP							pCi/L
Uranium-238	5.3E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB108C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71688.7 E57155.5	33.277583 °N 81.655553 °W	196.0-186.0 ft msl	266.2 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/14/97	10/13/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	217.4	216.7	ft msl
pH	6.6	4.7	pH
Sp. conductance	120	185	µS/cm
Water temperature	21.0	20.4	°C
Alkalinity as CaCO ₃	60	59	mg/L
Turbidity	1	2	NTU
Volumes purged	3.6	4.1	well volumes
Sampling code			
Synchronous water level	217.7 (09/11/97)	217.9 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	8.0	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	3.6	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	0.69	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,800	1	V			GE	1,700	1				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<1.1	1	V			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<0.75	1	V			GE							µg/L
Zinc, total recoverable	<14	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB108C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>1.2E-01</i>	1	UI			GP							pCi/L
Carbon-14	<i>6.8E+00</i>	1	UI			GP							pCi/L
Cobalt-60	<i>-1.1E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>-6.1E-04</i>	1	UI			GP							pCi/L
Curium-243/244	<i>5.1E-02</i>	1	UI			GP							pCi/L
Curium-245/246	<i>2.9E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>2.6E-01</i>	1	UI			GP	1.2E+00	1				GP	pCi/L
Iodine-129	<i>3.1E-01</i>	1	UJI			GP							pCi/L
Nickel-63	<i>-1.1E-01</i>		UI										pCi/L
Nonvolatile beta	<i>2.3E+00</i>	1				GP	2.4E+00	1				GP	pCi/L
Plutonium-238	<i>3.0E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>2.3E-02</i>	1	UI			GP							pCi/L
Radium-226	<i>9.5E-02</i>	1	UI			GP							pCi/L
Radium-228	<i>1.5E+00</i>	1	UIV			GP							pCi/L
Strontium-90	<i>3.2E+00</i>	1	J			GP							pCi/L
Technetium-99	<i>4.7E+00</i>	1	UI			GP							pCi/L
Thorium-228	<i>-1.3E-01</i>	1	UI			GP							pCi/L
Thorium-230	<i>-1.4E-02</i>	1	UI			GP							pCi/L
Thorium-232	<i>4.1E-02</i>	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	<i>3.2E+00</i>												pCi/L
Tritium	<i>1.4E+02</i>	1		■		GP	1.4E+02	1		■		GP	pCi/mL
Uranium-233/234	<i>8.8E-02</i>	1	UI			GP							pCi/L
Uranium-235	<i>-1.2E-02</i>	1	UI			GP							pCi/L
Uranium-238	<i>1.3E-02</i>	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB108D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71688.0 E57145.6	33.277566 °N 81.655577 °W	232.0-212.0 ft msl	266.3 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE 07/01/97 10/01/97

FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	221.7	221.0	ft msl
pH	5.0	4.4	pH
Sp. conductance	74	76	µS/cm
Water temperature	21.0	25.0	°C
Alkalinity as CaCO ₃	2	0	mg/L
Turbidity	3	2	NTU
Volumes purged	3.8	5.6	well volumes
Sampling code			
Synchronous water level	222.8 (09/11/97)	222.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	17	1				GE							µg/L
Cadmium, total recoverable	0.28	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	2.8	1	JE			GE							µg/L
Copper, total recoverable	3.8	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.9	1	JE			GE							µg/L
Mercury, total recoverable	1.7	1				GE	2.4	1	V	■		GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	6,600	5				GE	4,900	10				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	24	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	60	1		■		GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB108D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	4.0E-02	1	UI			GP							pCi/L
Carbon-14	2.3E+01	1				GP							pCi/L
Cobalt-60	2.4E+01	1				GP							pCi/L
Curium-242	-5.3E-03	1	UI			GP							pCi/L
Curium-243/244	5.5E-02	1	UI			GP							pCi/L
Curium-245/246	-1.0E-02	1	UI			GP							pCi/L
Gross alpha	1.8E+01	1		■		GP	7.6E+00	1				GP	pCi/L
Iodine-129	1.8E+00	1				GP							pCi/L
Nickel-63	2.4E+01												pCi/L
Nonvolatile beta	1.1E+03	1		■		GP	1.7E+03	1		■		GP	pCi/L
Plutonium-238	8.6E-01	1	UJIV			GP							pCi/L
Plutonium-239/240	2.1E-01	1				GP							pCi/L
Radium-226	2.6E+00	1				GP							pCi/L
Radium-228	7.5E+01	1		■		GP							pCi/L
Strontium-90	5.8E+02	1		■		GP							pCi/L
Technetium-99	4.4E+00	1	UI			GP							pCi/L
Thorium-228	4.9E-02	1	UI			GP							pCi/L
Thorium-230	4.4E-01	1	UIV			GP							pCi/L
Thorium-232	-7.2E-03	1	UI			GP							pCi/L
Total alpha emitters	5.3E-01												pCi/L
Total beta emitters	7.2E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	7.8E+01			■									pCi/L
Tritium	3.1E+02	1		■		GP	3.4E+02	1		■		GP	pCi/mL
Uranium-233/234	3.2E-01	1				GP							pCi/L
Uranium-235	6.7E-02	1	UI			GP							pCi/L
Uranium-238	5.2E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB109C

<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>
N71684.8 E56895.6	33.277151 °N 81.656229 °W	178.4-168.4 ft msl	261.6 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE 07/21/97 10/13/97

FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	217.5	216.8	ft msl
pH	6.0	4.7	pH
Sp. conductance	52	43	µS/cm
Water temperature	20.0	20.1	°C
Alkalinity as CaCO ₃	25	9	mg/L
Turbidity	1	1	NTU
Volumes purged	2.9	0.66	well volumes
Sampling code			
Synchronous water level	218.5 (09/11/97)	218.15 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	5.0	1	JEV			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	1.2	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.9	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	10	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,800	1				GE	1,900	1				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.81	1	JE			GE							µg/L
Zinc, total recoverable	<8.3	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB109C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	8.9E-02	1	UI			GP							pCi/L
Carbon-14	-2.7E-01	1	UI			GP							pCi/L
Cobalt-60	1.9E+00	1	UI			GP							pCi/L
Curium-242	-4.6E-02	1	UI			GP							pCi/L
Curium-243/244	2.9E-01	1	UI			GP							pCi/L
Curium-245/246	1.5E-01	1	UI			GP							pCi/L
Gross alpha	4.5E-01	1	UI			GP	7.3E-02	1	UI			GP	pCi/L
Iodine-129	1.2E+00	1	R4			GP							pCi/L
Nickel-63	1.9E+00		UI										pCi/L
Nonvolatile beta	1.4E+00	1	UI			GP	1.5E+00	1				GP	pCi/L
Plutonium-238	5.8E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-3.6E-02	1	UI			GP							pCi/L
Radium-226	4.9E-01	1				GP							pCi/L
Radium-228	7.2E-01	1	UI			GP							pCi/L
Strontium-90	3.4E-01	1	UI			GP							pCi/L
Technetium-99	-4.4E+00	1	UI			GP							pCi/L
Thorium-228	-4.7E-02	1	UI			GP							pCi/L
Thorium-230	1.1E-01	1	UI			GP							pCi/L
Thorium-232	8.4E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Total radium													
(Ra-226 plus Ra-228)	4.9E-01												pCi/L
Tritium	4.2E+01	1		■		GP	4.6E+01	1		■		GP	pCi/mL
Uranium-233/234	1.2E-01	1	UI			GP							pCi/L
Uranium-235	3.0E-02	1	UI			GP							pCi/L
Uranium-238	0.0E+00	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB109D

<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>
N71685.6 E56885.5	33.277136 °N 81.656257 °W	233.0-213.0 ft msl	261.2 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/03/97	10/01/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.0		ft msl
pH	4.2	4.0	pH
Sp. conductance	32	40	µS/cm
Water temperature	19.0	25.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	0.19		well volumes
Sampling code	XN	S	
Synchronous water level	222.2 (09/11/97)	221.4 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	22	1	V			GE							µg/L
Cadmium, total recoverable	0.34	1	JE			GE							µg/L
Chromium, total recoverable	1.5	1	JE			GE							µg/L
Cobalt, total recoverable	1.6	1	JE			GE							µg/L
Copper, total recoverable	19	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	17	1				GE							µg/L
Mercury, total recoverable	0.28	1				GE	0.51	1	V			GE	µg/L
Nickel, total recoverable	6.2	1	J			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,700	2	V			GE	2,600	5				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1	J3			GE							µg/L
Tin, total recoverable	<7.5	1	JV			GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	36	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB109D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	4.6E-02	1	UI			GP							pCi/L
Carbon-14	1.3E+01	1	UI			GP							pCi/L
Cobalt-60	3.9E+00	1	UI			GP							pCi/L
Curium-242	8.3E-03	1	UI			GP							pCi/L
Curium-243/244	9.6E-04	1	UI			GP							pCi/L
Curium-245/246	3.5E-02	1	UI			GP							pCi/L
Gross alpha	6.0E+00	1				GP	6.0E+00	1				GP	pCi/L
Iodine-129	2.6E+00	1				GP							pCi/L
Nickel-63	3.9E+00		UI										pCi/L
Nonvolatile beta	3.0E+02	1		■		GP	3.2E+02	1		■		GP	pCi/L
Plutonium-238	2.5E-02	1	UI			GP							pCi/L
Plutonium-239/240	-1.6E-02	1	UJ13			GP							pCi/L
Radium-226	2.8E-01	1				GP							pCi/L
Radium-228	3.7E+00	1	V			GP							pCi/L
Strontium-90	1.8E+02	1	J	■		GP							pCi/L
Technetium-99	-2.6E+00	1	UI			GP							pCi/L
Thorium-228	-1.9E-02	1	UI			GP							pCi/L
Thorium-230	4.9E-01	1	RV4			GP							pCi/L
Thorium-232	8.2E-02	1	R4			GP							pCi/L
Total alpha emitters	3.2E-01												pCi/L
Total beta emitters	1.9E+02			■									pCi/L
Total radium (Ra-226 plus Ra-228)	3.9E+00												pCi/L
Tritium	4.1E+01	1	V	■		GP	4.3E+01	1		■		GP	pCi/mL
Uranium-233/234	1.4E-01	1				GP							pCi/L
Uranium-235	1.5E-02	1	UI			GP							pCi/L
Uranium-238	1.8E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB110C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71779.3 E56680.7	33.277009 °N 81.656979 °W	181.4-171.4 ft msl	255.7 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/14/97	10/09/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	217.9	217.2	ft msl
pH	4.8	5.3	pH
Sp. conductance	22	21	µS/cm
Water temperature	21.0	22.8	°C
Alkalinity as CaCO ₃	3	3	mg/L
Turbidity	1	2	NTU
Volumes purged	3.0	0.067	well volumes
Sampling code		XN	
Synchronous water level	218.7 (09/11/97)	218.35 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	4.0	1	JEV			GE							µg/L
Cadmium, total recoverable	0.28	1	JE			GE							µg/L
Chromium, total recoverable	2.1	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.2	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.4	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	490	1	V			GE	510	1				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	6.0	1	JE	■		GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<11	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	210	2		■		GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB110C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.4E-02	1	UI			GP							pCi/L
Carbon-14	-5.2E-01	1	UI			GP							pCi/L
Cobalt-60	1.7E+00	1	UI			GP							pCi/L
Curium-242	-5.7E-03	1	UI			GP							pCi/L
Curium-243/244	6.0E-02	1	UI			GP							pCi/L
Curium-245/246	3.0E-02	1	UI			GP							pCi/L
Gross alpha	4.5E-01	1	UI			GP	2.2E-01	1	UJI			GP	pCi/L
Iodine-129	3.1E-01	1	UJI			GP							pCi/L
Nickel-63	1.7E+00		UI										pCi/L
Nonvolatile beta	9.1E-01	1	UI			GP	1.8E+00	1				GP	pCi/L
Plutonium-238	4.8E-02	1	UJI			GP							pCi/L
Plutonium-239/240	-2.0E-02	1	UI			GP							pCi/L
Radium-226	3.4E-01	1	UI			GP							pCi/L
Radium-228	1.4E+00	1	UIV			GP							pCi/L
Strontium-90	-1.8E-01	1	UJI			GP							pCi/L
Technetium-99	5.2E-01	1	UI			GP							pCi/L
Thorium-228	2.0E-02	1	UI			GP							pCi/L
Thorium-230	6.4E-02	1	UI			GP							pCi/L
Thorium-232	-7.4E-03	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	5.9E+00	1				GP	1.1E+01	1				GP	pCi/mL
Uranium-233/234	9.2E-02	1	UI			GP							pCi/L
Uranium-235	-1.1E-02	1	UI			GP							pCi/L
Uranium-238	7.5E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB110D

<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>
N71785.2 E56672.1	33.277008 °N 81.657013 °W	231.4-211.4 ft msl	255.6 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/14/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.5	219.6	ft msl
pH	4.0	4.3	pH
Sp. conductance	40	41	µS/cm
Water temperature	20.0	19.5	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	9.5	3.7	well volumes
Sampling code			
Synchronous water level	221.2 (09/11/97)	220.8 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	4.7	1	JEV			GE							µg/L
Cadmium, total recoverable	0.27	1	JE			GE							µg/L
Chromium, total recoverable	1.4	1	JE			GE							µg/L
Cobalt, total recoverable	1.2	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	8.5	1	JE			GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,500	1	V			GE	2,100	2				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<0.67	1	V			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<0.60	1	V			GE							µg/L
Zinc, total recoverable	<9.0	5	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB110D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.6E-02	1	UJI			GP							pCi/L
Carbon-14	8.6E-01	1	UI			GP							pCi/L
Cobalt-60	1.6E+00	1	UI			GP							pCi/L
Curium-242	-5.5E-02	1	UI			GP							pCi/L
Curium-243/244	5.6E-01	1	UJI			GP							pCi/L
Curium-245/246	3.3E-02	1	UI			GP							pCi/L
Gross alpha	2.5E+00	1				GP	3.3E+00	1	J			GP	pCi/L
Iodine-129	5.8E-01	1	UJI			GP							pCi/L
Nickel-63	1.6E+00		UI										pCi/L
Nonvolatile beta	5.7E+01	1		■		GP	9.8E+01	1		■		GP	pCi/L
Plutonium-238	2.2E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-7.2E-03	1	UI			GP							pCi/L
Radium-226	9.7E-01	1				GP							pCi/L
Radium-228	2.6E+00	1	UIV			GP							pCi/L
Strontium-90	1.8E+00	1	J			GP							pCi/L
Technetium-99	-3.2E+00	1	UI			GP							pCi/L
Thorium-228	1.7E-02	1	UI			GP							pCi/L
Thorium-230	3.0E-02	1	UI			GP							pCi/L
Thorium-232	0.0E+00	1	UI			GP							pCi/L
Total alpha emitters	6.7E-01												pCi/L
Total beta emitters	1.8E+00												pCi/L
Total radium													pCi/L
(Ra-226 plus Ra-228)	9.7E-01												pCi/L
Tritium	1.7E+01	1				GP	2.3E+01	1		■		GP	pCi/mL
Uranium-233/234	3.9E-01	1				GP							pCi/L
Uranium-235	4.2E-02	1	UI			GP							pCi/L
Uranium-238	2.7E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB111C

<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>
N71919.4 E56501.9	33.277027 °N 81.657722 °W	150.7-140.7 ft msl	256 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/22/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	218.7	218.1	ft msl
pH	4.8	4.6	pH
Sp. conductance	100	155	µS/cm
Water temperature	20.0	19.9	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	4.1	2.5	well volumes
Sampling code			
Synchronous water level	219.7 (09/11/97)	219.33 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<20	1	V			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	11	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	2.8	1	JE			GE							µg/L
Cobalt, total recoverable	1.5	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.0	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	2.5	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	6,400	5				GE	11,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	1.2	1	JE			GE							µg/L
Tin, total recoverable	<11	1	V			GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<22	1	V			GE							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<11	1	J1		●	GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB111C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.9E-01	1	UJI			GP							pCi/L
Carbon-14	7.1E-01	1	UI			GP							pCi/L
Cobalt-60	5.3E-02	1	UI			GP							pCi/L
Curium-242	4.1E-01	1	UI			GP							pCi/L
Curium-243/244	6.6E-01	1	UI			GP							pCi/L
Curium-245/246	2.7E-01	1	UI			GP							pCi/L
Gross alpha	3.8E-01	1	UI			GP	7.4E-01	1	UJI			GP	pCi/L
Iodine-129	8.0E-01	1	UI			GP							pCi/L
Nickel-63	5.3E-02		UI										pCi/L
Nonvolatile beta	1.5E+01	1				GP	2.2E+01	1				GP	pCi/L
Plutonium-238	1.2E-01	1	UJI			GP							pCi/L
Plutonium-239/240	6.7E-02	1	UI			GP							pCi/L
Radium-226	1.8E-01	1	UI			GP							pCi/L
Radium-228	3.1E-03	1	UI			GP							pCi/L
Strontium-90	1.3E+00	1	UI			GP							pCi/L
Technetium-99	4.9E+01	1				GP							pCi/L
Thorium-228	1.2E-02	1	UI			GP							pCi/L
Thorium-230	5.9E-02	1	UI			GP							pCi/L
Thorium-232	3.0E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	4.9E+01												
Tritium	1.3E+03	1		■		GP	1.3E+03	1		■		GP	pCi/L
Uranium-233/234	1.9E-01	1	UI			GP							pCi/L
Uranium-235	5.6E-02	1	UI			GP							pCi/L
Uranium-238	3.3E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB111D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71926.2 E56494.5	33.277030 °N 81.657754 °W	195.7-185.7 ft msl	256 ft msl	4" PVC	V	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	220.1	219.3	ft msl
pH	5.0	4.8	pH
Sp. conductance	200	240	µS/cm
Water temperature	21.0	19.0	°C
Alkalinity as CaCO ₃	0	2	mg/L
Turbidity	0	1	NTU
Volumes purged	2.3	2.9	well volumes
Sampling code			
Synchronous water level	221.1 (09/11/97)	220.55 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	13	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	1.0	1	JE			GE							µg/L
Cobalt, total recoverable	1.2	1	JE			GE							µg/L
Copper, total recoverable	2.9	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.13	1	JE			GE	<0.20	1	V			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	23,000	20	V	■		GE	23,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.69	1	JE			GE							µg/L
Zinc, total recoverable	<7.9	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB111D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.2E-01	1	UI			GP							pCi/L
Carbon-14	4.1E+01	1				GP							pCi/L
Cobalt-60	8.7E-01	1	UI			GP							pCi/L
Curium-242	-1.2E-02	1	UI			GP							pCi/L
Curium-243/244	8.1E-03	1	UI			GP							pCi/L
Curium-245/246	-1.1E-02	1	UI			GP							pCi/L
Gross alpha	8.1E-01	1	UI			GP	2.7E+00	1				GP	pCi/L
Iodine-129	3.6E+00	1				GP							pCi/L
Nickel-63	8.7E-01		UI										pCi/L
Nonvolatile beta	3.1E+01	1				GP	4.5E+01	1				GP	pCi/L
Plutonium-238	2.5E-01	1	UJI			GP							pCi/L
Plutonium-239/240	1.0E-02	1	UI			GP							pCi/L
Radium-226	1.9E+00	1				GP							pCi/L
Radium-228	1.7E+00	1	UIV			GP							pCi/L
Strontium-90	3.7E-01	1	UI			GP							pCi/L
Technetium-99	9.2E+01	1		■		GP							pCi/L
Thorium-228	4.5E-02	1	UI			GP							pCi/L
Thorium-230	1.0E-01	1	UI			GP							pCi/L
Thorium-232	-8.8E-03	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	1.4E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.9E+00												pCi/L
Tritium	3.5E+03	1		■		GP	3.5E+03	1		■		GP	pCi/mL
Uranium-233/234	-8.4E-03	1	UI			GP							pCi/L
Uranium-235	-2.4E-02	1	UI			GP							pCi/L
Uranium-238	7.3E-03	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB111E

<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>
N71932.8 E56487.2	33.277033 °N 81.657786 °W	231.7-211.7 ft msl	255.9 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/01/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.2	219.3	ft msl
pH	4.4	4.0	pH
Sp. conductance	50	42	µS/cm
Water temperature	22.0	25.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	0	NTU
Volumes purged	5.2	8.2	well volumes
Sampling code			
Synchronous water level	221.4 (09/11/97)	220.6 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	6.9	1				GE							µg/L
Cadmium, total recoverable	<5.0	1	J			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	3.4	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	2.0	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,200	3				GE	2,200	2	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.80	1	JE			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	20	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB111E (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	7.2E-02	1	UI			GP							pCi/L
Carbon-14	2.0E+00	1	UI			GP							pCi/L
Cobalt-60	3.4E+00	1	UI			GP							pCi/L
Curium-242	4.3E-04	1	UI			GP							pCi/L
Curium-243/244	2.0E-01	1				GP							pCi/L
Curium-245/246	1.0E-04	1	UI			GP							pCi/L
Gross alpha	4.0E+00	1				GP	2.6E+00	1	J			GP	pCi/L
Iodine-129	1.1E+00	1	R4			GP							pCi/L
Nickel-63	3.4E+00		UI										pCi/L
Nonvolatile beta	1.4E+02	1		■		GP	8.6E+01	1		■		GP	pCi/L
Plutonium-238	2.6E-01	1	UJIV			GP							pCi/L
Plutonium-239/240	3.8E-04	1	UI			GP							pCi/L
Radium-226	1.5E+00	1				GP							pCi/L
Radium-228	3.8E+00	1				GP							pCi/L
Strontium-90	9.4E+01	1		■		GP							pCi/L
Technetium-99	8.3E+00	1	UI			GP							pCi/L
Thorium-228	1.0E-01	1	UI			GP							pCi/L
Thorium-230	3.6E-01	1	UIV			GP							pCi/L
Thorium-232	6.5E-02	1	UI			GP							pCi/L
Total alpha emitters	8.4E-01												pCi/L
Total beta emitters	9.8E+01			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	5.3E+00			■									pCi/L
Tritium	9.9E+02	1		■		GP	8.3E+02	1		■		GP	pCi/mL
Uranium-233/234	4.5E-01	1				GP							pCi/L
Uranium-235	9.6E-02	1	UI			GP							pCi/L
Uranium-238	2.0E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB112C

<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>
N72156.4 E56417.4	33.277413 °N 81.658404 °W	150.6-140.6 ft msl	254.9 ft msl	4" PVC	S	Bamwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	219.9	218.1	ft msl
pH	5.8	5.9	pH
Sp. conductance	84	107	µS/cm
Water temperature	20.0	20.4	°C
Alkalinity as CaCO ₃	11	12	mg/L
Turbidity	2	1	NTU
Volumes purged	3.5	2.7	well volumes
Sampling code			
Synchronous water level	221.0 (09/11/97)	220.45 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	19	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	1.9	1	JE			GE							µg/L
Cobalt, total recoverable	0.92	1	JE			GE							µg/L
Copper, total recoverable	2.6	1	JE			GE							µg/L
Cyanide	6.6	1	JE			GE							µg/L
Lead, total recoverable	1.6	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	5.1	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	6,500	5				GE	5,600	3				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<4.4	1	V			GE							µg/L
Vanadium, total recoverable	0.52	1	JE			GE							µg/L
Zinc, total recoverable	45	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB112C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	4.5E-02	1	UI			GP							pCi/L
Carbon-14	1.5E+01	1				GP							pCi/L
Cobalt-60	8.0E-01	1	UI			GP							pCi/L
Curium-242	-3.2E-02	1	UI			GP							pCi/L
Curium-243/244	1.7E-02	1	UI			GP							pCi/L
Curium-245/246	8.0E-02	1	UI			GP							pCi/L
Gross alpha	4.5E-01	1	UI			GP	1.9E+00	1				GP	pCi/L
Iodine-129	9.8E-01	1				GP							pCi/L
Nickel-63	8.0E-01		UI										pCi/L
Nonvolatile beta	5.8E+00	1				GP	1.9E+01	1				GP	pCi/L
Plutonium-238	1.8E-01	1	UI			GP							pCi/L
Plutonium-239/240	-5.5E-02	1	UI			GP							pCi/L
Radium-226	5.4E-01	1				GP							pCi/L
Radium-228	4.3E-01	1	UI			GP							pCi/L
Strontium-90	6.8E-01	1	UI			GP							pCi/L
Technetium-99	3.1E+01	1				GP							pCi/L
Thorium-228	-1.2E-01	1	UI			GP							pCi/L
Thorium-230	4.2E-02	1	UI			GP							pCi/L
Thorium-232	-1.4E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	4.7E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	5.4E-01												pCi/L
Tritium	8.0E+02	1		■		GP	8.6E+02	1		■		GP	pCi/mL
Uranium-233/234	2.9E-01	1	UI			GP							pCi/L
Uranium-235	-3.4E-02	1	UI			GP							pCi/L
Uranium-238	0.0E+00	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB112D

<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>
N72161.6 E56408.1	33.277410 °N 81.658439 °W	198.3-188.3 ft msl	255.1 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/21/97	10/20/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.1	220.3	ft msl
pH		5.2	pH
Sp. conductance		100	µS/cm
Water temperature		19.0	°C
Alkalinity as CaCO ₃		3	mg/L
Turbidity		0	NTU
Volumes purged		4.2	well volumes
Sampling code	NW		
Synchronous water level	221.8 (09/11/97)	221.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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							<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen							6,400	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB112D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241							
Carbon-14							
Cobalt-60							
Curium-242							
Curium-243/244							
Curium-245/246							
Gross alpha	5.8E-01	1	UI			GP	pCi/L
Iodine-129							
Nickel-63							
Nonvolatile beta	9.5E+00	1				GP	pCi/L
Plutonium-238							
Plutonium-239/240							
Radium-226							
Radium-228							
Strontium-90							
Technetium-99							
Thorium-228							
Thorium-230							
Thorium-232							
Total alpha emitters							
Total beta emitters							
Tritium	1.1E+03	1		■		GP	pCi/mL
Uranium-233/234							
Uranium-235							
Uranium-238							

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

● = exceeded holding time

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

WELL HSB112E

<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>
N72166.6 E56399.5	33.277407 °N 81.658471 °W	231.7-211.7 ft msl	255.1 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.7	219.8	ft msl
pH	4.6	4.6	pH
Sp. conductance	68	66	µS/cm
Water temperature	19.0	24.0	°C
Alkalinity as CaCO ₃	2	2	mg/L
Turbidity	3	6	NTU
Volumes purged	0.17	0.19	well volumes
Sampling code	XN	XN	
Synchronous water level	221.6 (09/11/97)	221.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	2.2	1	JE			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	13	1				GE							µg/L
Cadmium, total recoverable	0.49	1	JE			GE							µg/L
Chromium, total recoverable	1.5	1	JE			GE							µg/L
Cobalt, total recoverable	3.1	1	JE	■		GE							µg/L
Copper, total recoverable	16	1				GE							µg/L
Cyanide	53	1		■		GE							µg/L
Lead, total recoverable	1.5	1	JE			GE							µg/L
Mercury, total recoverable	0.12	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable	3.0	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,800	4				GE	4,100	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.55	1	JE			GE							µg/L
Zinc, total recoverable	13	1				GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB112E (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.2E-02	1	UI			GP							pCi/L
Carbon-14	4.1E+00	1	UI			GP							pCi/L
Cobalt-60	7.0E-01	1	UI			GP							pCi/L
Curium-242	5.2E-02	1	UI			GP							pCi/L
Curium-243/244	2.6E-02	1	UI			GP							pCi/L
Curium-245/246	3.2E-02	1	UI			GP							pCi/L
Gross alpha	3.9E+00	1				GP	1.9E+00	1	J			GP	pCi/L
Iodine-129	1.4E+00	1	R4			GP							pCi/L
Nickel-63	7.0E-01		UI										pCi/L
Nonvolatile beta	1.3E+02	1		■		GP	1.0E+02	1		■		GP	pCi/L
Plutonium-238	1.9E-01	1	UJIV			GP							pCi/L
Plutonium-239/240	7.8E-02	1				GP							pCi/L
Radium-226	7.3E-01	1				GP							pCi/L
Radium-228	3.4E+00	1	V			GP							pCi/L
Strontium-90	6.3E+01	1	J	■		GP							pCi/L
Technetium-99	7.2E+00	1	UI			GP							pCi/L
Thorium-228	-5.8E-03	1	UI			GP							pCi/L
Thorium-230	1.5E-01	1	UIV			GP							pCi/L
Thorium-232	3.5E-02	1	UI			GP							pCi/L
Total alpha emitters	3.8E-01												pCi/L
Total beta emitters	6.7E+01			■									pCi/L
Total radium (Ra-226 plus Ra-228)	4.2E+00												pCi/L
Tritium	8.5E+01	1	V	■		GP	7.5E+01	1		■		GP	pCi/mL
Uranium-233/234	3.0E-01	1				GP							pCi/L
Uranium-235	3.5E-02	1	UI			GP							pCi/L
Uranium-238	8.2E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB113C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72312.3 E56160.4	33.277339 °N 81.659384 °W	161.7-151.7 ft msl	261 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE 07/23/97 10/07/97

FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	220.0	219.3	ft msl
pH	4.8	4.7	pH
Sp. conductance	140	112	µS/cm
Water temperature	20.0	20.2	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	0	0	NTU
Volumes purged	3.0	2.5	well volumes
Sampling code			
Synchronous water level	221.1 (09/11/97)	220.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	29	1	V			GE							µg/L
Cadmium, total recoverable	0.46	1	JE			GE							µg/L
Chromium, total recoverable	1.3	1	JE			GE							µg/L
Cobalt, total recoverable	1.4	1	JE			GE							µg/L
Copper, total recoverable	1.7	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	0.73	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	0.12	1	JE			GE	µg/L
Nickel, total recoverable	2.7	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	12,000	10	V	■		GE	12,000	10		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<20	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB113C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	5.2E-02	1	UJI			GP							pCi/L
Carbon-14	2.4E+01	1				GP							pCi/L
Cobalt-60	2.0E+00	1	UI			GP							pCi/L
Curium-242	-5.2E-02	1	UI			GP							pCi/L
Curium-243/244	1.5E-01	1	UJI			GP							pCi/L
Curium-245/246	6.2E-02	1	UI			GP							pCi/L
Gross alpha	2.5E+00	1				GP	3.8E+00	1				GP	pCi/L
Iodine-129	2.1E-01	1	UI			GP							pCi/L
Nickel-63	2.0E+00		UI										pCi/L
Nonvolatile beta	3.5E+01	1				GP	3.3E+01	1				GP	pCi/L
Plutonium-238	2.2E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-9.2E-02	1	UI			GP							pCi/L
Radium-226	8.2E-01	1				GP							pCi/L
Radium-228	6.1E-01	1	UI			GP							pCi/L
Strontium-90	-1.7E-02	1	UJI			GP							pCi/L
Technetium-99	4.4E+01	1				GP							pCi/L
Thorium-228	-2.4E-01	1	UI			GP							pCi/L
Thorium-230	2.4E-01	1	UI			GP							pCi/L
Thorium-232	-1.1E-01	1	UI			GP							pCi/L
Total alpha emitters	4.4E-01												pCi/L
Total beta emitters	6.8E+01			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	8.2E-01												pCi/L
Tritium	1.2E+03	1		■		GP	1.2E+03	1		■		GP	pCi/mL
Uranium-233/234	4.4E-01	1				GP							pCi/L
Uranium-235	1.4E-01	1	UI			GP							pCi/L
Uranium-238	1.1E-01	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB113D

<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>
N72302.7 E56164.3	33.277324 °N 81.659355 °W	236.2-216.2 ft msl	260.9 ft msl	4" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/07/97	12/26/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.2	221.6	ft msl
pH	3.8	3.4	pH
Sp. conductance	260	240	µS/cm
Water temperature	21.0	18.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	10	3.4	well volumes
Sampling code	XN	XN	
Synchronous water level	221.3 (09/11/97)	221.0 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	49	1	V			GE							µg/L
Cadmium, total recoverable	0.44	1	JE			GE							µg/L
Chromium, total recoverable	1.3	1	JE			GE							µg/L
Cobalt, total recoverable	6.2	1		■		GE							µg/L
Copper, total recoverable	9.4	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.4	1	JE			GE							µg/L
Mercury, total recoverable	0.42	1				GE	0.64	1				GE	µg/L
Nickel, total recoverable	8.6	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	29,000	20		■		GE	26,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<1.2	1	V			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	73	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB113D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	3.1E-01	1	UI			GP							pCi/L
Carbon-14	1.2E+02	1		■		GP							pCi/L
Cobalt-60	5.5E+01	1		■		GP							pCi/L
Curium-242	5.6E-03	1	UI			GP							pCi/L
Curium-243/244	1.1E+00	1				GP							pCi/L
Curium-245/246	6.9E-02	1	UI			GP							pCi/L
Gross alpha	1.0E+01	1				GP	4.0E+01	1		■		GP	pCi/L
Iodine-129	7.1E+01	1		■		GP							pCi/L
Nickel-63	2.1E+02	1	J	■		TM							pCi/L
Nonvolatile beta	4.7E+02	1		■		GP	1.1E+03	1		■		GP	pCi/L
Plutonium-238	-9.6E-04	1	UJI			GP							pCi/L
Plutonium-239/240	2.6E-02	1	UI			GP							pCi/L
Radium-226	8.6E+00	1	V	■		GP							pCi/L
Radium-228	3.1E+01	1		■		GP							pCi/L
Strontium-90	6.1E+02	1		■		GP							pCi/L
Technetium-99	1.0E+02	1	J	■		GP							pCi/L
Thorium-228	-7.1E-02	1	UI			GP							pCi/L
Thorium-230	4.3E-01	1	UIV			GP							pCi/L
Thorium-232	0.0E+00	1	UI			GP							pCi/L
Total alpha emitters	3.1E+00												pCi/L
Total beta emitters	1.2E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	3.9E+01			■									pCi/L
Tritium	2.9E+03	1		■		GP	1.0E+03	1		■		GP	pCi/mL
Uranium-233/234	1.3E+00	1				GP							pCi/L
Uranium-235	4.4E-02	1	UI			GP							pCi/L
Uranium-238	7.0E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB114C

<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>
N72464.6 E56107.0	33.277589 °N 81.659820 °W	195.6-185.6 ft msl	263.8 ft msl	4" PVC	V	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.1	225.4	ft msl
pH	4.6	4.4	pH
Sp. conductance	240	240	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	2.4	2.0	well volumes
Sampling code			
Synchronous water level	222.1 (09/11/97)	221.65 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	32	1	V			GE							µg/L
Cadmium, total recoverable	0.61	1	JE			GE							µg/L
Chromium, total recoverable	1.7	1	JE			GE							µg/L
Cobalt, total recoverable	2.7	1	JE			GE							µg/L
Copper, total recoverable	3.3	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<1.1	1	V			GE							µg/L
Mercury, total recoverable	0.25	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	4.5	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	23,000	20	V	■		GE	27,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	12	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	27	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB114C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.1E-02	1	UI			GP							pCi/L
Carbon-14	1.4E+02	1		■		GP							pCi/L
Cobalt-60	-8.5E-01	1	UI			GP							pCi/L
Curium-242	1.1E-01	1	UI			GP							pCi/L
Curium-243/244	1.8E-01	1	UI			GP							pCi/L
Curium-245/246	5.4E-02	1	UI			GP							pCi/L
Gross alpha	4.7E+00	1				GP	5.1E+00	1				GP	pCi/L
Iodine-129	2.7E+00	1				GP							pCi/L
Nickel-63	-8.5E-01		UI										pCi/L
Nonvolatile beta	5.2E+01	1		■		GP	6.6E+01	1		■		GP	pCi/L
Plutonium-238	1.6E-01	1	UJI			GP							pCi/L
Plutonium-239/240	2.7E-02	1	UI			GP							pCi/L
Radium-226	4.0E+00	1				GP							pCi/L
Radium-228	2.5E+00	1	UIV			GP							pCi/L
Strontium-90	2.0E-01	1	UI			GP							pCi/L
Technetium-99	1.2E+02	1		■		GP							pCi/L
Thorium-228	6.2E-02	1	UI			GP							pCi/L
Thorium-230	1.4E-01	1	UI			GP							pCi/L
Thorium-232	-1.8E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	2.6E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	4.0E+00												pCi/L
Tritium	3.3E+03	1		■		GP	4.0E+03	1		■		GP	pCi/mL
Uranium-233/234	-6.1E-02	1	UI			GP							pCi/L
Uranium-235	1.2E-02	1	UI			GP							pCi/L
Uranium-238	2.9E-03	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB114D

<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>
N72474.2 E56104.6	33.277606 °N 81.659845 °W	232.8-212.8 ft msl	264 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.6	219.7	ft msl
pH	3.8	3.6	pH
Sp. conductance	300	340	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	6.1	6.2	well volumes
Sampling code			
Synchronous water level	222.0 (09/11/97)	221.45 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	47	1	V			GE							µg/L
Cadmium, total recoverable	0.44	1	JE			GE							µg/L
Chromium, total recoverable	0.97	1	JE			GE							µg/L
Cobalt, total recoverable	12	1		■		GE							µg/L
Copper, total recoverable	8.9	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.7	1	JE			GE							µg/L
Mercury, total recoverable	0.18	1	JE			GE	0.29	1				GE	µg/L
Nickel, total recoverable	12	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	37,000	20		■		GE	40,000	40		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<1.1	1	V			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	51	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB114D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.4E-01	1	UI			GP							pCi/L
Carbon-14	1.2E+02	1		■		GP							pCi/L
Cobalt-60	5.0E+01	1				GP							pCi/L
Curium-242	1.7E-02	1	UI			GP							pCi/L
Curium-243/244	3.4E-01	1				GP							pCi/L
Curium-245/246	-1.1E-04	1	UI			GP							pCi/L
Gross alpha	1.3E+01	1				GP	4.6E+01	1		■		GP	pCi/L
Iodine-129	1.4E+02	1		■		GP							pCi/L
Nickel-63	5.0E+01												pCi/L
Nonvolatile beta	5.2E+02	1		■		GP	1.4E+03	1		■		GP	pCi/L
Plutonium-238	9.8E-02	1	UJI			GP							pCi/L
Plutonium-239/240	5.7E-02	1	UI			GP							pCi/L
Radium-226	1.1E+01	1	V	■		GP							pCi/L
Radium-228	3.9E+01	1		■		GP							pCi/L
Strontium-90	7.7E+02	1		■		GP							pCi/L
Technetium-99	1.1E+02	1	J	■		GP							pCi/L
Thorium-228	6.7E-02	1	UI			GP							pCi/L
Thorium-230	5.6E-01	1	UIV			GP							pCi/L
Thorium-232	4.0E-01	1				GP							pCi/L
Total alpha emitters	3.6E+00												pCi/L
Total beta emitters	1.3E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	5.0E+01			■									pCi/L
Tritium	6.3E+03	1		■		GP	6.7E+03	1		■		GP	pCi/mL
Uranium-233/234	1.6E+00	1				GP							pCi/L
Uranium-235	1.2E-01	1				GP							pCi/L
Uranium-238	1.1E+00	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB115C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72653.2 E56043.2	33.277902 °N 81.660355 °W	192.8-182.8 ft msl	269.3 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/17/97	10/21/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	221.8	220.6	ft msl
pH	5.8	5.4	pH
Sp. conductance	180	200	µS/cm
Water temperature	22.0	19.0	°C
Alkalinity as CaCO ₃	9	13	mg/L
Turbidity	0	0	NTU
Volumes purged	3.5	4.8	well volumes
Sampling code			
Synchronous water level	222.5 (09/11/97)	222.2 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	23	1	V			GE							µg/L
Cadmium, total recoverable	0.81	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	2.5	1	JE			GE							µg/L
Copper, total recoverable	2.1	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<1.1	1	V			GE							µg/L
Mercury, total recoverable	0.15	1	JE			GE	<0.11	1	V			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	19,000	20	V	■		GE	18,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.66	1	JE			GE							µg/L
Zinc, total recoverable	<8.5	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB115C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.3E-02	1	UI			GP							pCi/L
Carbon-14	9.0E+01	1		■		GP							pCi/L
Cobalt-60	1.6E+00	1	UI			GP							pCi/L
Curium-242	6.5E-02	1	UI			GP							pCi/L
Curium-243/244	2.1E-01	1	UI			GP							pCi/L
Curium-245/246	7.5E-02	1	UI			GP							pCi/L
Gross alpha	6.8E+00	1				GP	1.3E+00	1	UI			GP	pCi/L
Iodine-129	8.8E+00	1				GP							pCi/L
Nickel-63	1.6E+00		UI										pCi/L
Nonvolatile beta	3.6E+01	1				GP	5.1E+01	1		■		GP	pCi/L
Plutonium-238	6.4E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-1.2E-01	1	UI			GP							pCi/L
Radium-226	2.4E+00	1				GP							pCi/L
Radium-228	1.3E+00	1	UIV			GP							pCi/L
Strontium-90	7.1E+00	1				GP							pCi/L
Technetium-99	7.0E+01	1		■		GP							pCi/L
Thorium-228	1.1E-01	1	UI			GP							pCi/L
Thorium-230	3.6E-02	1	UI			GP							pCi/L
Thorium-232	-3.2E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	1.8E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	2.4E+00												pCi/L
Tritium	3.7E+03	1		■		GP	3.3E+03	1		■		GP	pCi/mL
Uranium-233/234	1.1E-01	1	UI			GP							pCi/L
Uranium-235	2.4E-02	1	UI			GP							pCi/L
Uranium-238	7.3E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB115D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72662.3 E56039.8	33.277916 °N 81.660381 °W	233.9-213.9 ft msl	269.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	08/20/97	10/09/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	221.2	220.5	ft msl
pH	3.8	4.0	pH
Sp. conductance	380	240	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	140	47	NTU
Volumes purged	0.21	0.23	well volumes
Sampling code	XN	XN	
Synchronous water level	222.4 (09/11/97)	222.05 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable													
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide	<10	1				GE							µg/L
Lead, total recoverable													
Mercury, total recoverable							0.16	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	30,000	40	V	■		GE	30,000	20		■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<10	1				GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	2.1	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB115D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	8.2E-02	1	UI			GP							pCi/L
Carbon-14	4.8E+01	1				GP							pCi/L
Cobalt-60	1.1E+02	1		■		GP							pCi/L
Curium-242	1.8E-02	1	UI			GP							pCi/L
Curium-243/244	2.6E-01	1				GP							pCi/L
Curium-245/246	3.4E-02	1	UI			GP							pCi/L
Gross alpha	8.3E+01	1		■		GP	4.9E+01	1		■		GP	pCi/L
Iodine-129	1.7E+01	1				GP							pCi/L
Nickel-63	3.4E+02	1		■		GP							pCi/L
Nonvolatile beta	3.4E+03	1	V	■		GP	3.4E+03	1		■		GP	pCi/L
Plutonium-238	2.0E-01	1	JV			GP							pCi/L
Plutonium-239/240	2.4E-02	1	UJ13			GP							pCi/L
Radium-226	1.3E+01	1	V	■		GP							pCi/L
Radium-228	2.2E+02	1		■		GP							pCi/L
Strontium-90	1.7E+03	1		■		GP							pCi/L
Technetium-99	4.3E+01	1	J			GP							pCi/L
Thorium-228	1.2E-01	1	UI			GP							pCi/L
Thorium-230	6.7E-01	1	UIV			GP							pCi/L
Thorium-232	3.4E-02	1	UI			GP							pCi/L
Total alpha emitters	3.3E+00												pCi/L
Total beta emitters	2.4E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	2.4E+02			■									pCi/L
Tritium	3.2E+03	1		■		GP	3.4E+03	1		■		GP	pCi/mL
Uranium-233/234	1.6E+00	1				GP							pCi/L
Uranium-235	5.6E-02	1	UI			GP							pCi/L
Uranium-238	1.3E+00	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB116C

<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>
N72888.1 E55989.1	33.278333 °N 81.660953 °W	190.5-180.5 ft msl	257.5 ft msl	4" PVC	V	Barnwell (IIB1)

SAMPLE DATE	07/18/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	222.7	221.5	ft msl
pH	5.0	4.8	pH
Sp. conductance	100	100	µS/cm
Water temperature	21.0	19.0	°C
Alkalinity as CaCO ₃	3	3	mg/L
Turbidity	0	0	NTU
Volumes purged	4.0	2.6	well volumes
Sampling code			
Synchronous water level	223.8 (09/11/97)	223.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	8.2	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	4.9	1	JE	■		GE							µg/L
Copper, total recoverable	2.1	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.26	1				GE	<0.65	1	V			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	9,300	10	V			GE	9,400	20	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<6.5	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB116C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.6E-01	1	UI			GP							pCi/L
Carbon-14	1.4E+01	1				GP							pCi/L
Cobalt-60	-2.5E-01	1	UI			GP							pCi/L
Curium-242	5.4E-02	1	UI			GP							pCi/L
Curium-243/244	1.8E-01	1	UI			GP							pCi/L
Curium-245/246	1.0E-02	1	UI			GP							pCi/L
Gross alpha	2.7E-01	1	UI			GP	1.4E+00	1				GP	pCi/L
Iodine-129	3.9E+00	1				GP							pCi/L
Nickel-63	-2.5E-01		UI										pCi/L
Nonvolatile beta	4.4E+00	1				GP	1.1E+01	1				GP	pCi/L
Plutonium-238	1.1E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-3.7E-02	1	UI			GP							pCi/L
Radium-226	6.3E-01	1				GP							pCi/L
Radium-228	4.6E-01	1	UI			GP							pCi/L
Strontium-90	-1.1E-01	1	UI			GP							pCi/L
Technetium-99	3.0E+01	1				GP							pCi/L
Thorium-228	5.6E-01	1	UI			GP							pCi/L
Thorium-230	1.4E-01	1	UI			GP							pCi/L
Thorium-232	-1.1E-02	1	UI			GP							pCi/L
Total alpha emitters	1.1E+00												pCi/L
Total beta emitters	4.8E+01												pCi/L
Total radium (Ra-226 plus Ra-228)	6.3E-01												pCi/L
Tritium	1.7E+03	1		■		GP	1.7E+03	1		■		GP	pCi/mL
Uranium-233/234	2.8E-01	1	V			GP							pCi/L
Uranium-235	-9.2E-03	1	UI			GP							pCi/L
Uranium-238	7.9E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB116D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72898.1 E55988.2	33.278354 °N 81.660975 °W	234.5-214.5 ft msl	256.8 ft msl	4" PVC	V	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	222.6	221.7	ft msl
pH	4.0	4.2	pH
Sp. conductance	100	98	µS/cm
Water temperature	23.0	23.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	4.0	0.21	well volumes
Sampling code		XN	
Synchronous water level	223.9 (09/11/97)	223.35 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	1.8	1	JE			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	34	1				GE							µg/L
Cadmium, total recoverable	0.33	1	JE			GE							µg/L
Chromium, total recoverable	2.0	1	JE			GE							µg/L
Cobalt, total recoverable	1.4	1	JE			GE							µg/L
Copper, total recoverable	5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	3.8	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	2.9	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,800	10				GE	9,300	5	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	14	1				GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB116D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	7.1E-02	1	UI			GP							pCi/L
Carbon-14	1.9E+01	1	UI			GP							pCi/L
Cobalt-60	2.0E+01	1				GP							pCi/L
Curium-242	-2.4E-02	1	UI			GP							pCi/L
Curium-243/244	9.4E-02	1	UI			GP							pCi/L
Curium-245/246	1.1E-02	1	UI			GP							pCi/L
Gross alpha	1.9E+01	1		■		GP	1.2E+01	1	J			GP	pCi/L
Iodine-129	1.6E+00	1				GP							pCi/L
Nickel-63	2.0E+01												pCi/L
Nonvolatile beta	1.3E+03	1		■		GP	1.3E+03	1		■		GP	pCi/L
Plutonium-238	2.4E-01	1	UJIV			GP							pCi/L
Plutonium-239/240	4.2E-03	1	UI			GP							pCi/L
Radium-226	4.8E+00	1				GP							pCi/L
Radium-228	3.0E+01	1	V	■		GP							pCi/L
Strontium-90	9.4E+02	1	J	■		GP							pCi/L
Technetium-99	7.0E-01	1	UI			GP							pCi/L
Thorium-228	-3.1E-02	1	UI			GP							pCi/L
Thorium-230	3.1E-01	1	UIV			GP							pCi/L
Thorium-232	1.4E-02	1	UI			GP							pCi/L
Total alpha emitters	4.3E-01												pCi/L
Total beta emitters	1.0E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	3.5E+01			■									pCi/L
Tritium	8.5E+01	1	V	■		GP	6.1E+01	1		■		GP	pCi/mL
Uranium-233/234	2.3E-01	1				GP							pCi/L
Uranium-235	4.1E-02	1	UI			GP							pCi/L
Uranium-238	1.9E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB117A

<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>
N72733.6 E55170.1	33.276655 °N 81.662810 °W	94.8-84.8 ft msl	237.3 ft msl	4" PVC	S	M. Congaree (IIA)

SAMPLE DATE	07/01/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	165.8	165.8	ft msl
pH	7.0	6.6	pH
Sp. conductance	120	113	µS/cm
Water temperature	19.0	19.9	°C
Alkalinity as CaCO ₃	30	67	mg/L
Turbidity	7	1	NTU
Volumes purged	2.4	2.2	well volumes
Sampling code			
Synchronous water level	166.6 (09/15/97)	166.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<50	1				GE	30	1	JE			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB117A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.0E+00	1				GP	1.8E+00	1	V			TM	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.5E+00	1				GP	3.2E+00	1	J1			TM	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	-1.2E-01	1	UI			GP	0.0E+00	1	UJI			TM	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB117C

<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>
N72740.7 E55162.9	33.276659 °N 81.662842 °W	175.1-165.1 ft msl	237.4 ft msl	4" PVC	V	Barnwell (IIB1)

SAMPLE DATE	07/21/97	10/20/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	219.3	217.8	ft msl
pH	4.4	4.2	pH
Sp. conductance	340	360	µS/cm
Water temperature	19.0	18.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	2.5	2.4	well volumes
Sampling code			
Synchronous water level	220.9 (09/15/97)	220.6 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	68	1	V			GE							µg/L
Cadmium, total recoverable	0.35	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	4.2	1	JE	■		GE							µg/L
Copper, total recoverable	2.6	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.27	1				GE	<0.34	1	V			GE	µg/L
Nickel, total recoverable	2.3	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	43,000	20		■		GE	41,000	40	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<12	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB117C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.6E-01	1	UI			GP							pCi/L
Carbon-14	7.2E+01	1		■		GP							pCi/L
Cobalt-60	-3.5E+00	1	UI			GP							pCi/L
Curium-242	-2.1E-02	1	UI			GP							pCi/L
Curium-243/244	5.0E-01	1	UI			GP							pCi/L
Curium-245/246	3.1E-01	1	UI			GP							pCi/L
Gross alpha	1.3E+01	1				GP	1.8E+01	1		■		GP	pCi/L
Iodine-129	8.2E-01	1	UI			GP							pCi/L
Nickel-63	-3.5E+00		UI										pCi/L
Nonvolatile beta	6.4E+01	1		■		GP	1.0E+02	1		■		GP	pCi/L
Plutonium-238	1.1E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-6.2E-02	1	UI			GP							pCi/L
Radium-226	5.6E+00	1		■		GP							pCi/L
Radium-228	1.4E+00	1				GP							pCi/L
Strontium-90	1.0E-01	1	UI			GP							pCi/L
Technetium-99	2.1E+02	1		■		GP							pCi/L
Thorium-228	-1.0E-01	1	UI			GP							pCi/L
Thorium-230	3.9E-01	1				GP							pCi/L
Thorium-232	3.7E-02	1	UI			GP							pCi/L
Total alpha emitters	3.9E-01												pCi/L
Total beta emitters	2.8E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	7.0E+00			■									pCi/L
Tritium	5.6E+03	1		■		GP	6.0E+03	1		■		GP	pCi/mL
Uranium-233/234	2.4E-01	1	UI			GP							pCi/L
Uranium-235	1.2E-01	1	UI			GP							pCi/L
Uranium-238	3.9E-01	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB117D

<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>
N72747.6 E55155.6	33.276662 °N 81.662875 °W	220.3-200.3 ft msl	237.6 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/01/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.3	219.3	ft msl
pH	5.0	4.9	pH
Sp. conductance	20	21	µS/cm
Water temperature	18.0	20.2	°C
Alkalinity as CaCO ₃	1	1	mg/L
Turbidity	15	5	NTU
Volumes purged	4.3	4.7	well volumes
Sampling code			
Synchronous water level	222.8 (09/15/97)	223.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	600	1				GE	480	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB117D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.0E+00	1				GP	5.7E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	7.5E-01	1	UI			GP	3.0E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.5E+01	1				GP	2.1E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB118A

<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>
N72696.4 E55775.6	33.277561 °N 81.661143 °W	101.0-91.0 ft msl	247.3 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/17/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	167.5	166.9	ft msl
pH	6.8	6.7	pH
Sp. conductance	160	117	µS/cm
Water temperature	21.0	21.3	°C
Alkalinity as CaCO ₃	67	61	mg/L
Turbidity	1	0	NTU
Volumes purged	8.2	3.0	well volumes
Sampling code			
Synchronous water level	168.3 (09/15/97)	167.4 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	28	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	2.0	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,700	10	V			GE	6,100	10	V			WA	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.54	1	JE			GE							µg/L
Zinc, total recoverable	<4.9	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB118A (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.5E-01	1	UI			GP							pCi/L
Carbon-14	3.2E+01	1				GP							pCi/L
Cobalt-60	-2.1E-01	1	UI			GP							pCi/L
Curium-242	9.2E-02	1	UI			GP							pCi/L
Curium-243/244	1.2E-01	1	UI			GP							pCi/L
Curium-245/246	1.2E-02	1	UI			GP							pCi/L
Gross alpha	7.5E-01	1	UI			GP	2.9E+00	1	V			TM	pCi/L
Iodine-129	4.6E-01	1	UI			GP							pCi/L
Nickel-63	-2.1E-01		UI										pCi/L
Nonvolatile beta	3.4E+00	1				GP	7.8E+00	1				TM	pCi/L
Plutonium-238	-1.2E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-2.1E-01	1	UI			GP							pCi/L
Radium-226	8.7E-01	1				GP							pCi/L
Radium-228	2.0E+00	1	UIV			GP							pCi/L
Strontium-90	6.3E-01	1	UI			GP							pCi/L
Technetium-99	1.1E+01	1	UI			GP							pCi/L
Thorium-228	5.1E-01	1	UI			GP							pCi/L
Thorium-230	4.0E-01	1	R4			GP							pCi/L
Thorium-232	6.3E-02	1	UI			GP							pCi/L
Total alpha emitters	1.6E+00												pCi/L
Total beta emitters	3.2E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	8.7E-01												pCi/L
Tritium	2.6E+03	1		■		GP	2.8E+03	1		■		TM	pCi/mL
Uranium-233/234	8.5E-01	1				GP							pCi/L
Uranium-235	4.7E-02	1	UI			GP							pCi/L
Uranium-238	7.8E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB119A

<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>
N73082.5 E56100.2	33.278944 °N 81.661038 °W	103.3-93.3 ft msl	257.1 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/22/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	166.6	166.3	ft msl
pH	6.0	6.3	pH
Sp. conductance	120	113	µS/cm
Water temperature	22.0	21.7	°C
Alkalinity as CaCO ₃	35	46	mg/L
Turbidity	2	1	NTU
Volumes purged	2.9	2.8	well volumes
Sampling code			
Synchronous water level	167.3 (09/11/97)	166.8 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	15	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	1.5	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	3.2	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	4.4	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	0.11	1	JE			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	5,400	5				GE	4,900	3	J			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	1.1	1	JE			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	0.57	1	JE			GE							µg/L
Zinc, total recoverable	35	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB119A (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.9E-01	1	UJI			GP							pCi/L
Carbon-14	6.0E+01	1		■		GP							pCi/L
Cobalt-60	-1.1E+00	1	UI			GP							pCi/L
Curium-242	-2.9E-03	1	UI			GP							pCi/L
Curium-243/244	4.9E-01	1	UI			GP							pCi/L
Curium-245/246	2.0E-01	1	UI			GP							pCi/L
Gross alpha	2.3E+00	1				GP	2.3E+00	1				GP	pCi/L
Iodine-129	4.8E-01	1	UI			GP							pCi/L
Nickel-63	-1.1E+00		UI										pCi/L
Nonvolatile beta	1.6E+01	1				GP	7.8E+00	1				GP	pCi/L
Plutonium-238	3.6E-01	1	UJI			GP							pCi/L
Plutonium-239/240	4.6E-02	1	UI			GP							pCi/L
Radium-226	1.6E-01	1	UI			GP							pCi/L
Radium-228	4.6E-01	1	UI			GP							pCi/L
Strontium-90	-5.8E-01	1	UJI			GP							pCi/L
Technetium-99	2.5E+01	1				GP							pCi/L
Thorium-228	-1.2E-02	1	UI			GP							pCi/L
Thorium-230	1.1E-01	1	UI			GP							pCi/L
Thorium-232	-3.4E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	8.4E+01			■									pCi/L
Tritium	3.7E+02	1		■		GP	3.8E+02	1		■		GP	pCi/mL
Uranium-233/234	4.5E-02	1	UI			GP							pCi/L
Uranium-235	5.2E-02	1	UI			GP							pCi/L
Uranium-238	0.0E+00	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB120A

<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>
N73395.1 E56431.9	33.280177 °N 81.660772 °W	101.0-91.0 ft msl	268.2 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/22/97	10/06/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	166.1	165.8	ft msl
pH	7.0	7.1	pH
Sp. conductance	160	119	µS/cm
Water temperature	21.0	19.7	°C
Alkalinity as CaCO ₃	91	86	mg/L
Turbidity	1	1	NTU
Volumes purged	2.8	4.2	well volumes
Sampling code			
Synchronous water level	166.5 (09/11/97)	166.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	31	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	2.3	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<50	1				GE	30	1	JE			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	0.77	1	JE			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<5.3	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB120A (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.2E-01	1	UJI			GP							pCi/L
Carbon-14	-7.3E+00	1	UI			GP							pCi/L
Cobalt-60	-2.4E-01	1	UI			GP							pCi/L
Curium-242	-7.2E-02	1	UI			GP							pCi/L
Curium-243/244	1.8E-01	1	UI			GP							pCi/L
Curium-245/246	-3.3E-02	1	UI			GP							pCi/L
Gross alpha	4.1E-01	1	UI			GP	6.1E-01	1	UI			GP	pCi/L
Iodine-129	5.1E-01	1	UI			GP							pCi/L
Nickel-63	-2.4E-01		UI										pCi/L
Nonvolatile beta	1.1E+00	1				GP	8.3E-01	1	UI			GP	pCi/L
Plutonium-238	5.9E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-2.9E-02	1	UI			GP							pCi/L
Radium-226	0.0E+00	1	UI			GP							pCi/L
Radium-228	-1.6E-01	1	UI			GP							pCi/L
Strontium-90	-6.4E-01	1	UI			GP							pCi/L
Technetium-99	-8.3E+00	1	UI			GP							pCi/L
Thorium-228	-5.5E-03	1	UI			GP							pCi/L
Thorium-230	0.0E+00	1	UI			GP							pCi/L
Thorium-232	1.4E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	-2.9E-01	1	UI			GP	-2.8E-01	1	UI			GP	pCi/mL
Uranium-233/234	9.5E-02	1	UI			GP							pCi/L
Uranium-235	-3.6E-02	1	UI			GP							pCi/L
Uranium-238	3.0E-01	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB121A

<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>
N72024.8 E57389.6	33.278709 °N 81.655589 °W	98.3-88.3 ft msl	274.6 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/22/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	171.4	171.1	ft msl
pH	6.8	7.3	pH
Sp. conductance	180	121	µS/cm
Water temperature	20.0	20.3	°C
Alkalinity as CaCO ₃	28	111	mg/L
Turbidity	6	0	NTU
Volumes purged	2.6	2.7	well volumes
Sampling code			
Synchronous water level	172.2 (09/15/97)	171.5 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	69	1				GE							µg/L
Cadmium, total recoverable	<4.7	1	Y			WA							µg/L
Chromium, total recoverable	1.4	1	JE			GE							µg/L
Cobalt, total recoverable	<1.1	1	VY			WA							µg/L
Copper, total recoverable	2.6	1	JEY			WA							µg/L
Cyanide	5.5	1	JE			GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<11	1	VY			WA	<60	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	7.9	1	JEY	■		WA							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	11	1	JEY			WA							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	9.2	1	JE			GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB121A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	-5.4E-03	1	UJI			GP							pCi/L
Carbon-14	-6.3E-01	1	UI			GP							pCi/L
Cobalt-60	3.7E-01	1	UI			GP							pCi/L
Curium-242	-6.0E-02	1	UI			TM							pCi/L
Curium-243/244	-9.0E-02	1	UI			TM							pCi/L
Curium-245/246	-1.1E-01	1	UI			GP							pCi/L
Gross alpha	2.2E+00	1	J1			TM	2.8E+00	1	J			GP	pCi/L
Iodine-129	5.6E-03	1	UI			GP							pCi/L
Nickel-63	3.7E-01		UI										pCi/L
Nonvolatile beta	2.7E+00	1				GP	3.9E+00	1				GP	pCi/L
Plutonium-238	3.3E-01	1	UJI			GP							pCi/L
Plutonium-239/240	1.8E-03	1	UI			GP							pCi/L
Radium-226	4.6E-01	1				GP							pCi/L
Radium-228	3.3E+00	1	J1			TM							pCi/L
Strontium-90	1.6E-01	1	UI			GP							pCi/L
Technetium-99	0.0E+00	1	UI			GP							pCi/L
Thorium-228	6.4E-01	1				GP							pCi/L
Thorium-230	6.7E-02	1	UI			GP							pCi/L
Thorium-232	7.3E-03	1	UI			GP							pCi/L
Total alpha emitters	6.4E-01												pCi/L
Total beta emitters	3.3E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	3.8E+00												pCi/L
Tritium	-3.0E-02	1	UI			TM	4.7E-02	1	UI			GP	pCi/mL
Uranium-233/234	-5.9E-02	1	UI			GP							pCi/L
Uranium-235	-3.1E-02	1	UI			GP							pCi/L
Uranium-238	2.8E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB122A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72195.9 E57747.4	33.279671 °N 81.654979 °W	95.4-85.4 ft msl	271.6 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/21/97	10/02/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	170.9	171.0	ft msl
pH	6.8	7.0	pH
Sp. conductance	200	120	µS/cm
Water temperature	20.0	20.2	°C
Alkalinity as CaCO ₃	77	95	mg/L
Turbidity	1	1	NTU
Volumes purged	4.1	2.8	well volumes
Sampling code			
Synchronous water level	171.9 (09/15/97)	171.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	25	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	3.0	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<1.2	1	V			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	0.16	1	JE			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	170	1				GE	<8.0	1	V			WA	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	2.6	1	JE			GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<9.1	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB122A (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.4E-01	1	UI			GP	pCi/L							
Carbon-14	-2.3E+00	1	UI			GP	pCi/L							
Cobalt-60	1.4E+00	1	UI			GP	pCi/L							
Curium-242	-2.6E-02	1	UI			GP	pCi/L							
Curium-243/244	1.2E-01	1	UI			GP	pCi/L							
Curium-245/246	2.9E-02	1	UI			GP	pCi/L							
Gross alpha	5.0E-01	1	UI			GP	pCi/L	3.9E-01	1	UI			TM	pCi/L
Iodine-129	6.8E-01	1	UJI			GP	pCi/L							
Nickel-63	1.4E+00		UI				pCi/L							
Nonvolatile beta	9.3E-01	1	UI			GP	pCi/L	1.4E+00	1				GP	pCi/L
Plutonium-238	2.6E-01	1	UJI			GP	pCi/L							
Plutonium-239/240	-2.0E-02	1	UI			GP	pCi/L							
Radium-226	2.8E-01	1	UI			GP	pCi/L							
Radium-228	4.5E-01	1	UI			GP	pCi/L							
Strontium-90	1.3E-01	1	UI			GP	pCi/L							
Technetium-99	-1.0E+01	1	UI			GP	pCi/L							
Thorium-228	-4.1E-01	1	UI			GP	pCi/L							
Thorium-230	8.2E-02	1	UI			GP	pCi/L							
Thorium-232	-2.3E-01	1	UI			GP	pCi/L							
Total alpha emitters														
Total beta emitters														
Tritium	-6.0E-02	1	UI			GP	pCi/mL	7.0E-02	1	UI			TM	pCi/mL
Uranium-233/234	1.0E-01	1	UI			GP	pCi/L							
Uranium-235	-7.9E-03	1	UI			GP	pCi/L							
Uranium-238	8.0E-02	1	UI			GP	pCi/L							

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

● = exceeded holding time

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

WELL HSB123A

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72189.8 E58124.8	33.280273 °N 81.653973 °W	103.6-93.6 ft msl	265.7 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/22/97	10/02/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	171.6	171.9	ft msl
pH	11.6	11.6	pH
Sp. conductance	1020	1110	µS/cm
Water temperature	20.0	19.4	°C
Alkalinity as CaCO ₃	300	303	mg/L
Turbidity	1	5	NTU
Volumes purged	0.0	0.19	well volumes
Sampling code	XN	XN	
Synchronous water level	172.5 (09/15/97)	172.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	420	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	2.8	1	JE			GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	22	1		■		GE							µg/L
Mercury, total recoverable	<0.20	1				GE	0.15	1	JE			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<50	1				GE	<40	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1	J3			GE							µg/L
Tin, total recoverable	<7.4	1	JV			GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<17	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB123A (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.5E-01	1	UJI			GP							pCi/L
Carbon-14	-1.7E+00	1	UI			GP							pCi/L
Cobalt-60	1.9E+00	1	UI			GP							pCi/L
Curium-242	1.6E-01	1	UI			GP							pCi/L
Curium-243/244	4.5E-01	1	UI			GP							pCi/L
Curium-245/246	1.2E-01	1	UI			GP							pCi/L
Gross alpha	3.1E+00	1				GP	6.4E+00	1	J			GP	pCi/L
Iodine-129	2.1E-01	1	UI			GP							pCi/L
Nickel-63	1.9E+00		UI										pCi/L
Nonvolatile beta	9.8E+00	1				GP	4.9E+00	1				GP	pCi/L
Plutonium-238	8.5E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-2.0E-03	1	UI			GP							pCi/L
Radium-226	1.8E+00	1				GP							pCi/L
Radium-228	2.1E+00	1				GP							pCi/L
Strontium-90	4.2E-01	1	UI			GP							pCi/L
Technetium-99	-4.0E+00	1	UI			GP							pCi/L
Thorium-228	2.1E-01	1	UI			GP							pCi/L
Thorium-230	1.9E-01	1	UI			GP							pCi/L
Thorium-232	2.3E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	2.1E+00												pCi/L
Total radium													
(Ra-226 plus Ra-228)	4.0E+00												pCi/L
Tritium	-5.7E-01	1	UI			GP	-1.6E-01	1	UI			GP	pCi/mL
Uranium-233/234	3.4E-01	1	UI			GP							pCi/L
Uranium-235	0.0E+00	1	UI			GP							pCi/L
Uranium-238	7.2E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB124AR

<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>
N72202.7 E58531.7	33.280965 °N 81.652927 °W	104.6-94.6 ft msl	266.8 ft msl	4" PVC	S	U. Congaree (IIA)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	171.3	172.6	ft msl
pH	7.0	4.9	pH
Sp. conductance	200	121	µS/cm
Water temperature	20.0	21.7	°C
Alkalinity as CaCO ₃	104	97	mg/L
Turbidity	1	1	NTU
Volumes purged	4.3	1.9	well volumes
Sampling code			
Synchronous water level	172.2 (09/15/97)	171.8 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	31	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	1.6	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.12	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<50	1				GE	60	1				GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<1.6	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB124AR (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	1.3E-01	1	UI			GP							pCi/L
Carbon-14	-1.2E+00	1	UI			GP							pCi/L
Cobalt-60	-2.3E-01	1	UI			GP							pCi/L
Curium-242	1.4E-02	1	UI			GP							pCi/L
Curium-243/244	2.8E-02	1	UI			GP							pCi/L
Curium-245/246	6.9E-02	1	UI			GP							pCi/L
Gross alpha	8.1E-01	1	UI			GP	7.5E-01	1	UI			GP	pCi/L
Iodine-129	1.4E-01	1	UJI			GP							pCi/L
Nickel-63	-2.3E-01		UI										pCi/L
Nonvolatile beta	1.2E+00	1				GP	1.3E+00	1				GP	pCi/L
Plutonium-238	-7.0E-02	1	UJI			GP							pCi/L
Plutonium-239/240	6.1E-02	1	UI			GP							pCi/L
Radium-226	2.6E-01	1	UI			GP							pCi/L
Radium-228	2.9E-01	1	UI			GP							pCi/L
Strontium-90	4.4E-02	1	UI			GP							pCi/L
Technetium-99	-1.0E+01	1	UI			GP							pCi/L
Thorium-228	5.0E-02	1	UI			GP							pCi/L
Thorium-230	1.2E-01	1	UI			GP							pCi/L
Thorium-232	-1.8E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	-1.6E-01	1	UI			GP	-1.0E-01	1	UI			GP	pCi/mL
Uranium-233/234	1.6E-01	1	UI			GP							pCi/L
Uranium-235	1.8E-01	1	UI			GP							pCi/L
Uranium-238	9.0E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB125C

<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>
N71503.6 E58592.8	33.279519 °N 81.651408 °W	155.6-145.6 ft msl	231.9 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	218.6	222.0	ft msl
pH	5.4	5.3	pH
Sp. conductance	22	21	µS/cm
Water temperature	20.0	20.6	°C
Alkalinity as CaCO ₃	6	3	mg/L
Turbidity	3	1	NTU
Volumes purged	2.3	2.7	well volumes
Sampling code			
Synchronous water level	222.8 (09/15/97)	223.15 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	110	1	V			GE	130	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB125C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+00	1				GP	1.1E-02	1	UJI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	7.7E-01	1	UI			GP	5.8E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.3E+00	1				GP	2.5E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB125D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71498.2 E58584.1	33.279492 °N 81.651421 °W	219.4-199.4 ft msl	231.7 ft msl	4" PVC	V	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	220.2	219.7	ft msl
pH	5.2	5.3	pH
Sp. conductance	180	112	µS/cm
Water temperature	19.0	19.3	°C
Alkalinity as CaCO ₃	8	6	mg/L
Turbidity	1	0	NTU
Volumes purged	2.5	1.1	well volumes
Sampling code			
Synchronous water level	227.2 (09/15/97)	221.0 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	8.8	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	0.85	1	JE			GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	2.3	1		■		GE	1.3	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	12,000	10	V	■		GE	8,600	10	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<7.1	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB125D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.0E-01	1	UI			GP							pCi/L
Carbon-14	5.5E+01	1		■		GP							pCi/L
Cobalt-60	-1.1E-01	1	UI			GP							pCi/L
Curium-242	-2.0E-02	1	UI			GP							pCi/L
Curium-243/244	-1.5E-01	1	UI			GP							pCi/L
Curium-245/246	-9.3E-03	1	UI			GP							pCi/L
Gross alpha	2.9E+00	1				GP	2.7E+00	1	J			GP	pCi/L
Iodine-129	2.1E+00	1				GP							pCi/L
Nickel-63	-1.1E-01		UI										pCi/L
Nonvolatile beta	6.5E+00	1				GP	6.3E+00	1				GP	pCi/L
Plutonium-238	6.5E-01	1	UI			GP							pCi/L
Plutonium-239/240	-4.8E-02	1	UI			GP							pCi/L
Radium-226	4.8E-01	1				GP							pCi/L
Radium-228	3.4E-01	1	UI			GP							pCi/L
Strontium-90	6.4E-01	1	UI			GP							pCi/L
Technetium-99	8.7E+00	1	UI			GP							pCi/L
Thorium-228	-2.3E-01	1	UI			GP							pCi/L
Thorium-230	-2.1E-02	1	UI			GP							pCi/L
Thorium-232	-6.1E-02	1	UI			GP							pCi/L
Total alpha emitters				■									pCi/L
Total beta emitters	5.7E+01												pCi/L
Total radium													pCi/L
(Ra-226 plus Ra-228)	4.8E-01												pCi/L
Tritium	1.2E+03	1		■		GP	7.7E+02	1		■		GP	pCi/mL
Uranium-233/234	1.9E-01	1	UI			GP							pCi/L
Uranium-235	7.6E-02	1	UI			GP							pCi/L
Uranium-238	-9.1E-03	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB126C

<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>
N70627.7 E57178.2	33.275273 °N 81.653432 °W	181.3-176.3 ft msl	212.6 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/01/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	203.9	203.9	ft msl
pH	7.4	7.0	pH
Sp. conductance	220	200	µS/cm
Water temperature	19.0	18.0	°C
Alkalinity as CaCO ₃	32	56	mg/L
Turbidity	5	1	NTU
Volumes purged	5.5	5.6	well volumes
Sampling code			
Synchronous water level	204.1 (09/11/97)	204.5 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	10,000	5		■		GE	8,800	10	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB126C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.6E-01	1	UI			GP	-6.1E-02	1	UJI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	5.8E+00	1				GP	5.4E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.1E+02	1		■		GP	4.4E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB126D

<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>
N70633.4 E57169.6	33.275272 °N 81.653466 °W	200.5-190.5 ft msl	212.7 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/21/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	205.0	205.2	ft msl
pH	4.8	4.4	pH
Sp. conductance	220	260	µS/cm
Water temperature	23.0	19.0	°C
Alkalinity as CaCO ₃	7	0	mg/L
Turbidity	12	9	NTU
Volumes purged	0.0	0.42	well volumes
Sampling code	XN	XN	
Synchronous water level	205.2 (09/11/97)	205.7 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	61	1	V			GE							µg/L
Cadmium, total recoverable	0.33	1	JE			GE							µg/L
Chromium, total recoverable	13	1				GE							µg/L
Cobalt, total recoverable	2.8	1	JE			GE							µg/L
Copper, total recoverable	8.6	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	5.1	1				GE							µg/L
Mercury, total recoverable	1.8	1				GE	2.4	1	V	■		GE	µg/L
Nickel, total recoverable	10	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	34,000	20		■		GE	29,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	1.9	1	JE			GE							µg/L
Zinc, total recoverable	<22	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB126D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	4.1E-01	1	UI			GP							pCi/L
Carbon-14	3.8E+00	1	UI			GP							pCi/L
Cobalt-60	5.0E+00	1	URI4			GP							pCi/L
Curium-242	2.6E-01	1	UI			GP							pCi/L
Curium-243/244	-1.2E-01	1	UI			GP							pCi/L
Curium-245/246	2.0E-01	1	UI			GP							pCi/L
Gross alpha	2.5E+00	1				GP	6.4E+00	1				GP	pCi/L
Iodine-129	8.0E+00	1				GP							pCi/L
Nickel-63	5.0E+00		UI										pCi/L
Nonvolatile beta	6.6E+00	1				GP	1.7E+01	1				GP	pCi/L
Plutonium-238	6.9E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-2.9E-01	1	UI			GP							pCi/L
Radium-226	8.9E-01	1				GP							pCi/L
Radium-228	1.1E+00	1				GP							pCi/L
Strontium-90	-2.7E-01	1	UI			GP							pCi/L
Technetium-99	4.2E+01	1				GP							pCi/L
Thorium-228	1.6E-01	1	UI			GP							pCi/L
Thorium-230	3.1E-01	1	UI			GP							pCi/L
Thorium-232	3.2E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	5.1E+01			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	2.0E+00												pCi/L
Tritium	1.8E+03	1		■		GP	1.6E+03	1		■		GP	pCi/mL
Uranium-233/234	-9.1E-02	1	UI			GP							pCi/L
Uranium-235	-1.3E-01	1	UI			GP							pCi/L
Uranium-238	-5.3E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB127C

<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>
N71210.1 E56792.1	33.275932 °N 81.655580 °W	158.4-148.4 ft msl	225.7 ft msl	4" PVC	S	Bamwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	209.9	209.2	ft msl
pH	6.8	7.0	pH
Sp. conductance	240	240	µS/cm
Water temperature	20.0	23.0	°C
Alkalinity as CaCO ₃	77	78	mg/L
Turbidity	1	1	NTU
Volumes purged	2.7	2.3	well volumes
Sampling code			
Synchronous water level	210.2 (09/15/97)	210.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	8,200	10	V			GE	8,800	5				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB127C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.5E-01	1	UI			GP	1.7E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	9.0E+00	1				GP	7.3E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	8.9E+02	1		■		GP	8.9E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB127D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71218.9 E56788.0	33.275945 °N 81.655608 °W	217.8-197.8 ft msl	226.1 ft msl	4" PVC	S	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	217.1	216.3	ft msl
pH	4.8	4.2	pH
Sp. conductance	130	120	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	0	0	NTU
Volumes purged	8.3	3.5	well volumes
Sampling code			
Synchronous water level	217.5 (09/15/97)	217.92 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	7.0	1	V			GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	1.4	1	JE			GE							µg/L
Copper, total recoverable	2.2	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	4.9	1		■		GE	3.8	1		■		GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	13,000	10		■		GE	11,000	10		■		GE	µg/L
Selenium, total recoverable	2.3	1	JE			GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<3.4	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB127D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	1.4E-01	1	UI			GP							pCi/L
Carbon-14	1.6E+00	1	UI			GP							pCi/L
Cobalt-60	2.3E-01	1	UI			GP							pCi/L
Curium-242	-6.3E-02	1	UI			GP							pCi/L
Curium-243/244	3.0E-01	1	UI			GP							pCi/L
Curium-245/246	1.3E-02	1	UI			GP							pCi/L
Gross alpha	4.8E+00	1				GP	6.9E+00	1				GP	pCi/L
Iodine-129	4.9E+00	1	J			GP							pCi/L
Nickel-63	2.3E-01		UI										pCi/L
Nonvolatile beta	3.2E+01	1				GP	3.5E+01	1				GP	pCi/L
Plutonium-238	3.8E-01	1	UJI			GP							pCi/L
Plutonium-239/240	-2.7E-02	1	UI			GP							pCi/L
Radium-226	9.4E-01	1				GP							pCi/L
Radium-228	8.9E-01	1				GP							pCi/L
Strontium-90	8.6E+00	1		■		GP							pCi/L
Technetium-99	2.9E+01	1				GP							pCi/L
Thorium-228	-4.4E-03	1	UI			GP							pCi/L
Thorium-230	1.1E-01	1	UI			GP							pCi/L
Thorium-232	-1.1E-01	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	4.3E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.8E+00												pCi/L
Tritium	1.0E+03	1		■		GP	1.1E+03	1		■		GP	pCi/mL
Uranium-233/234	1.7E-01	1	UI			GP							pCi/L
Uranium-235	1.8E-01	1	UI			GP							pCi/L
Uranium-238	0.0E+00	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB129C

<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>
N71830.4 E55110.0	33.274559 °N 81.661214 °W	157.8-147.8 ft msl	215.1 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	205.5	204.9	ft msl
pH	5.0	5.0	pH
Sp. conductance	220	240	µS/cm
Water temperature	20.8	17.0	°C
Alkalinity as CaCO ₃	1	5	mg/L
Turbidity	1	1	NTU
Volumes purged	0.0	2.2	well volumes
Sampling code	XN		
Synchronous water level	205.5 (09/15/97)	206.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.17	1	V			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	27,000	40	V	■		GE	28,000	20	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB129C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.3E+00	1				GP	7.6E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	8.8E+01	1		■		GP	8.7E+01	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.2E+03	1		■		GP	2.5E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB129D

<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>
N71837.1 E55103.4	33.274563 °N 81.661244 °W	205.2-185.2 ft msl	214.7 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	208.5	206.9	ft msl
pH	4.6	4.4	pH
Sp. conductance	160	140	µS/cm
Water temperature	21.4	19.0	°C
Alkalinity as CaCO ₃	1	0	mg/L
Turbidity	0	1	NTU
Volumes purged	4.4	3.2	well volumes
Sampling code			
Synchronous water level	207.8 (09/15/97)	208.77 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.24	1	JV			GE	<0.44	1	V			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	18,000	40	V	■		GE	15,000	20	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB129D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.8E+00	1				GP	5.5E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.1E+01	1				GP	2.7E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.6E+03	1		■		GP	1.5E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB130C

<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>
N70762.4 E54643.6	33.271436 °N 81.660367 °W	169.9-159.9 ft msl	218.3 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/14/97	10/08/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	199.9	199.7	ft msl
pH	7.4	7.5	pH
Sp. conductance	160	176	µS/cm
Water temperature	20.0	19.7	°C
Alkalinity as CaCO ₃	71	7	mg/L
Turbidity •	1	0	NTU
Volumes purged	4.6	2.6	well volumes
Sampling code			
Synchronous water level	199.7 (09/15/97)	200.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1	J3			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	250	1	V			GE	220	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB130C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.5E-01	1	UI			GP	2.1E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	6.5E-01	1	UI			GP	8.4E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.2E-01	1				GP	6.8E-01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB130D

<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>
N70757.2 E54651.7	33.271438 °N 81.660336 °W	202.1-182.1 ft msl	218.6 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	199.9	199.7	ft msl
pH	4.4	4.5	pH
Sp. conductance	26	19	µS/cm
Water temperature	20.0	18.9	°C
Alkalinity as CaCO ₃		2	mg/L
Turbidity	5	1	NTU
Volumes purged	0.086	0.26	well volumes
Sampling code	XN	XN	
Synchronous water level	199.9 (09/15/97)	200.45 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.15	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	430	1	V			GE	460	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB130D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.4E-01	1	UI			GP	1.1E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	5.4E-01	1	UI			GP	5.6E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	6.8E+00	1				GP	6.7E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB131C

<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>
N70374.7 E56894.9	33.274252 °N 81.653687 °W	158.5-148.5 ft msl	211.7 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/14/97	10/01/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	203.8	203.6	ft msl
pH	7.4	7.3	pH
Sp. conductance	160	120	µS/cm
Water temperature	19.0	17.8	°C
Alkalinity as CaCO ₃	67	99	mg/L
Turbidity	1	1	NTU
Volumes purged	2.8	2.5	well volumes
Sampling code			
Synchronous water level	203.7 (09/15/97)	204.15 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1	J			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,200	10	V			GE	2,600	10				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

Notes: Radionuclide results in italics are less than sample quantitation limit.
● = exceeded holding time
■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL HSB131C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	4.6E-01	1	UI			GP	4.3E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.5E+00	1				GP	3.2E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.4E+02	1		■		GP	1.4E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB131D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N70365.0 E56891.1	33.274224 °N 81.653678 °W	205.7-195.7 ft msl	212.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/14/97	10/01/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	205.4	205.5	ft msl
pH	5.2	4.7	pH
Sp. conductance	26	23	µS/cm
Water temperature	20.0	20.8	°C
Alkalinity as CaCO ₃	2	2	mg/L
Turbidity	14	2	NTU
Volumes purged	0.16	9.6	well volumes
Sampling code	XN		
Synchronous water level	204.3 (09/15/97)	205.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable													
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable													
Mercury, total recoverable	<0.20	1	J			GE	<0.12	1	V			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	250	1	V			GE	350	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB131D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.5E+00	1				GP	1.6E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.0E+00	1				GP	1.6E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.3E+00	1				GP	7.1E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB132C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71472.4 E58787.7	33.279768 °N 81.650835 °W	178.6-168.6 ft msl	240.5 ft msl	4" PVC	S	Bamwell (IIB1)

SAMPLE DATE	07/14/97	10/01/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	219.5	220.4	ft msl
pH	5.4	5.1	pH
Sp. conductance	50	21	µS/cm
Water temperature	20.0	20.2	°C
Alkalinity as CaCO ₃	2	4	mg/L
Turbidity	3	1	NTU
Volumes purged	0.030	1.7	well volumes
Sampling code	XN		
Synchronous water level	220.8 (09/15/97)	221.6 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit
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	<0.20	1	J			GE	µg/L
Nickel, total recoverable							
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen	50	1	JEV			GE	µg/L
Selenium, total recoverable							
Silver, total recoverable							
Tin, total recoverable							
Vanadium, total recoverable							
Zinc, total recoverable							

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB132C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+00	1				GP	4.8E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	8.8E-01	1	UI			GP	1.4E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.0E-01	1	UI			GP	7.8E-02	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB132D

<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>
N71469.5 E58799.3	33.279780 °N 81.650798 °W	226.5-206.5 ft msl	240.7 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/14/97	10/01/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	218.3	219.9	ft msl
pH	5.0	4.7	pH
Sp. conductance	20	17	µS/cm
Water temperature	19.0	19.7	°C
Alkalinity as CaCO ₃	2	0	mg/L
Turbidity	16	2	NTU
Volumes purged	0.13	1.8	well volumes
Sampling code	XN		
Synchronous water level	220.2 (09/15/97)	221.0 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1	J			GE	<0.13	1	V			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	630	1	V			GE	620	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB132D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	7.2E-01	1				GP	7.5E-01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	5.9E-01	1	UI			GP	1.2E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.4E+01	1				GP	1.3E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB133C

<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>
N71949.5 E59110.3	33.281349 °N 81.650912 °W	183.3-173.3 ft msl	255.6 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/15/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	229.6	229.9	ft msl
pH	5.8	9.4	pH
Sp. conductance	36	100	µS/cm
Water temperature	20.0	19.0	°C
Alkalinity as CaCO ₃	27	86	mg/L
Turbidity	2	3	NTU
Volumes purged	0.027	0.027	well volumes
Sampling code	XN	XN	
Synchronous water level	230.2 (09/15/97)	230.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<70	1	V			GE	<50	1	EV			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB133C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>9.4E-01</i>	1	UI			GP	<i>8.8E-01</i>	1	UJ13			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>7.1E-01</i>	1	UI			GP	<i>1.4E+00</i>	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>-2.1E-01</i>	1	UI			GP	<i>5.3E-01</i>	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB133D

<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>
N71943.5 E59102.3	33.281323 °N 81.650921 °W	228.5-208.5 ft msl	255.3 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/15/97	10/02/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	234.1	233.6	ft msl
pH	5.2	5.4	pH
Sp. conductance	52	58	µS/cm
Water temperature	19.0	18.0	°C
Alkalinity as CaCO ₃	2	2	mg/L
Turbidity	2	3	NTU
Volumes purged	3.3	3.5	well volumes
Sampling code			
Synchronous water level	234.5 (09/15/97)	235.7 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	500	1	V			GE	450	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB133D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.2E+00	1	UI			GP	1.0E+01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.9E-01	1	UI			GP	9.8E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.4E+01	1				GP	1.3E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB134C

<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>
N71210.3 E58289.9	33.278376 °N 81.651636 °W	159.1-149.1 ft msl	238.4 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/21/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	219.9	219.3	ft msl
pH	5.0	5.0	pH
Sp. conductance	34	32	µS/cm
Water temperature	20.7	20.0	°C
Alkalinity as CaCO ₃	1	2	mg/L
Turbidity	1	1	NTU
Volumes purged	2.4	2.4	well volumes
Sampling code			
Synchronous water level	220.2 (09/15/97)	220.7 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.11	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,300	1				GE	1,100	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB134C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.0E+00	1				TM	4.4E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.1E+01	1				TM	8.5E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.3E+01	1		■		GP	2.1E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB134D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71217.3 E58296.5	33.278402 °N 81.651633 °W	225.8-205.8 ft msl	238.1 ft msl	4" PVC	S	Water Table (IIB2)

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

Parameter	3Q97	4Q97	Unit
Water elevation	220.5	219.8	ft msl
pH	4.0	3.6	pH
Sp. conductance	180	120	µS/cm
Water temperature	20.0	23.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	5	1	NTU
Volumes purged	0.10	0.11	well volumes
Sampling code	XN	XN	
Synchronous water level	220.7 (09/15/97)	222.75 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1	J			GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	66	1				GE							µg/L
Cadmium, total recoverable	0.29	1	JE			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	2.5	1	JE			GE							µg/L
Copper, total recoverable	2.9	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.23	1				GE	1.0	1				GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	15,000	10	JV3	■		GE	14,000	20	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	8.1	1				GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB134D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	Unit	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	3.9E-02	1	UI			GP	pCi/L							
Carbon-14	1.4E+01	1	UI			GP	pCi/L							
Cobalt-60	4.8E+00	1				GP	pCi/L							
Curium-242	8.4E-02	1				GP	pCi/L							
Curium-243/244	5.5E-02	1	UI			GP	pCi/L							
Curium-245/246	5.0E-03	1	UI			GP	pCi/L							
Gross alpha	3.7E+01	1		■		GP	pCi/L	5.2E-01	1	UI			GP	pCi/L
Iodine-129	9.3E+00	1				GP	pCi/L							
Nickel-63	4.8E+00						pCi/L							
Nonvolatile beta	1.4E+03	1		■		GP	pCi/L	6.6E-01	1	UI			GP	pCi/L
Plutonium-238	1.5E-01	1	UJIV			GP	pCi/L							
Plutonium-239/240	3.3E-02	1	UJ13			GP	pCi/L							
Radium-226	1.6E+00	1				GP	pCi/L							
Radium-228	3.8E+01	1	V	■		GP	pCi/L							
Strontium-90	9.2E+02	1	J	■		GP	pCi/L							
Technetium-99	1.7E+01	1				GP	pCi/L							
Thorium-228	1.1E-01	1	UI			GP	pCi/L							
Thorium-230	3.6E-01	1	UIV			GP	pCi/L							
Thorium-232	6.0E-03	1	UI			GP	pCi/L							
Total alpha emitters	6.4E-01						pCi/L							
Total beta emitters	9.9E+02			■			pCi/L							
Total radium														
(Ra-226 plus Ra-228)	4.0E+01			■			pCi/L							
Tritium	7.0E+02	1	V	■		GP	pCi/mL	9.6E+02	1		■		GP	pCi/mL
Uranium-233/234	3.5E-01	1				GP	pCi/L							
Uranium-235	3.2E-02	1	UI			GP	pCi/L							
Uranium-238	2.1E-01	1				GP	pCi/L							

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

● = exceeded holding time

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

WELL HSB135C

<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>
N71390.2 E56560.8	33.275953 °N 81.656539 °W	157.3-147.3 ft msl	232 ft msl	4" PVC	S	Bamwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	206.6	206.1	ft msl
pH	7.6	7.5	pH
Sp. conductance	140	190	µS/cm
Water temperature	20.0	19.8	°C
Alkalinity as CaCO ₃	66	99	mg/L
Turbidity	9	5	NTU
Volumes purged	5.3	3.2	well volumes
Sampling code			
Synchronous water level	206.5 (09/15/97)	206.92 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	720	1	V			GE	820	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB135C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>-4.2E-01</i>	1	UI			GP	<i>9.5E-02</i>	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>8.6E-01</i>	1	UI			GP	<i>2.0E+00</i>	1	J1			TM	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>4.8E+01</i>	1		■		GP	<i>3.1E+01</i>	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB135D

<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>
N71396.7 E56552.8	33.275954 °N 81.656572 °W	219.9-199.9 ft msl	232.3 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	217.4	216.5	ft msl
pH	5.2	4.2	pH
Sp. conductance	28	34	µS/cm
Water temperature	20.0	23.0	°C
Alkalinity as CaCO ₃	2	3	mg/L
Turbidity	1	0	NTU
Volumes purged	4.6	7.7	well volumes
Sampling code			
Synchronous water level	217.7 (09/15/97)	217.87 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,800	1	V			GE	2,100	3				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB135D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.6E-02	1	UI			GP	1.5E+01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	4.3E+00	1				GP	7.3E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.8E+01	1		■		GP	3.5E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB136C

<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>
N71900.3 E55949.6	33.276084 °N 81.659139 °W	170.5-160.5 ft msl	227.9 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	216.0	215.2	ft msl
pH	6.0	6.0	pH
Sp. conductance	320	320	µS/cm
Water temperature	22.0	19.0	°C
Alkalinity as CaCO ₃	30	15	mg/L
Turbidity	3	1	NTU
Volumes purged	0.027	0.0	well volumes
Sampling code	XN	XN	
Synchronous water level	216.7 (09/15/97)	216.59 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	64	1	V			GE							µg/L
Cadmium, total recoverable	0.81	1	JE			GE							µg/L
Chromium, total recoverable	1.3	1	JE			GE							µg/L
Cobalt, total recoverable	1.2	1	JE			GE							µg/L
Copper, total recoverable	2.9	1	JE			GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	1.2	1	JE			GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.25	1	V			GE	µg/L
Nickel, total recoverable	2.6	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	34,000	20				GE	35,000	20	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	<17	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB136C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	5.1E-01	1	UI			GP							pCi/L
Carbon-14	2.1E+02	1		■		GP							pCi/L
Cobalt-60	8.0E-01	1	UI			GP							pCi/L
Curium-242	-2.8E-02	1	UI			GP							pCi/L
Curium-243/244	2.8E-01	1	UI			GP							pCi/L
Curium-245/246	1.8E-01	1	UI			GP							pCi/L
Gross alpha	6.9E+00	1				GP	3.8E+00	1				GP	pCi/L
Iodine-129	6.3E+00	1				GP							pCi/L
Nickel-63	8.0E-01		UI										pCi/L
Nonvolatile beta	6.6E+01	1		■		GP	6.7E+01	1		■		GP	pCi/L
Plutonium-238	4.0E+00	1	J			GP							pCi/L
Plutonium-239/240	3.6E-01	1	UI			GP							pCi/L
Radium-226	1.4E+00	1				GP							pCi/L
Radium-228	9.8E-01	1				GP							pCi/L
Strontium-90	-2.4E-01	1	UI			GP							pCi/L
Technetium-99	1.6E+02	1		■		GP							pCi/L
Thorium-228	-8.7E-02	1	UI			GP							pCi/L
Thorium-230	3.7E-01	1	UI			GP							pCi/L
Thorium-232	-3.2E-02	1	UI			GP							pCi/L
Total alpha emitters	4.0E+00												pCi/L
Total beta emitters	3.7E+02			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	2.4E+00												pCi/L
Tritium	5.8E+03	1		■		GP	6.5E+03	1		■		GP	pCi/mL
Uranium-233/234	-9.6E-02	1	UI			GP							pCi/L
Uranium-235	-2.0E-02	1	UI			GP							pCi/L
Uranium-238	8.3E-02	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB136D

<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>
N71906.0 E55941.7	33.276084 °N 81.659171 °W	220.2-200.2 ft msl	228 ft msl	4" PVC	V	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	219.1	218.0	ft msl
pH	4.0	3.8	pH
Sp. conductance	220	260	µS/cm
Water temperature	20.0	24.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	0	NTU
Volumes purged	6.0	6.9	well volumes
Sampling code			
Synchronous water level	219.8 (09/15/97)	220.01 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	62	1	V			GE							µg/L
Cadmium, total recoverable	<0.33	1	V			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	6.0	1		■		GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.32	1				GE	0.41	1				GE	µg/L
Nickel, total recoverable	8.9	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	28,000	20		■		GE	26,000	20		■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<1.2	1	V			GE							µg/L
Tin, total recoverable	<6.3	1	V			GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	48	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB136D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	2.8E-02	1	UI			GP							pCi/L
Carbon-14	1.3E+02	1		■		GP							pCi/L
Cobalt-60	5.0E+01	1		■		GP							pCi/L
Curium-242	2.0E-02	1	UI			GP							pCi/L
Curium-243/244	1.3E-01	1	UI			GP							pCi/L
Curium-245/246	4.6E-02	1	UI			GP							pCi/L
Gross alpha	7.8E+01	1		■		GP	5.9E+01	1		■		GP	pCi/L
Iodine-129	5.7E+01	1		■		GP							pCi/L
Nickel-63	3.8E+02	1	J	■		TM							pCi/L
Nonvolatile beta	1.3E+03	1		■		GP	1.4E+03	1		■		GP	pCi/L
Plutonium-238	3.2E-01	1	UJI			GP							pCi/L
Plutonium-239/240	1.3E-03	1	UI			GP							pCi/L
Radium-226	4.9E+01	1		■		GP							pCi/L
Radium-228	5.4E+01	1		■		GP							pCi/L
Strontium-90	8.0E+02	1		■		GP							pCi/L
Technetium-99	6.0E+01	1	J	■		GP							pCi/L
Thorium-228	2.2E-01	1	R4			GP							pCi/L
Thorium-230	7.1E-01	1	RV4			GP							pCi/L
Thorium-232	1.6E-01	1	R4			GP							pCi/L
Total alpha emitters	1.6E+00												pCi/L
Total beta emitters	1.5E+03			■									pCi/L
Total radium													
(Ra-226 plus Ra-228)	1.0E+02			■									pCi/L
Tritium	4.8E+03	1		■		GP	4.3E+03	1		■		GP	pCi/mL
Uranium-233/234	9.5E-01	1				GP							pCi/L
Uranium-235	2.6E-02	1	UI			GP							pCi/L
Uranium-238	6.2E-01	1				GP							pCi/L

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

● = exceeded holding time

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

WELL HSB137C

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72269.9 E55700.2	33.276494 °N 81.660513 °W	173.8-163.8 ft msl	236 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/16/97	10/21/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	218.4	217.0	ft msl
pH	5.6	6.0	pH
Sp. conductance	380	400	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	9	15	mg/L
Turbidity	2	2	NTU
Volumes purged	1.7	0.029	well volumes
Sampling code		XN	
Synchronous water level	219.2 (09/15/97)	219.39 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	40	1	V			GE							µg/L
Cadmium, total recoverable	<0.47	1	V			GE							µg/L
Chromium, total recoverable	<5.0	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	<5.0	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	<5.0	1				GE							µg/L
Mercury, total recoverable	0.19	1	JE			GE	<0.20	1	V			GE	µg/L
Nickel, total recoverable	<5.0	1				GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	43,000	40	V	■		GE	42,000	40	V	■		GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<10	1				GE							µg/L
Vanadium, total recoverable	<5.0	1				GE							µg/L
Zinc, total recoverable	19	1	V			GE							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<2.0	1				GE							µg/L
Bis(2-ethylhexyl) phthalate	<9.9	1	J1		●	GE							µg/L
Dichloromethane	<5.0	1				GE							µg/L
Tetrachloroethylene	<2.0	1				GE							µg/L
Trichloroethylene	<2.0	1				GE							µg/L
Trichlorofluoromethane	<2.0	1				GE							µg/L

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

● = exceeded holding time

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

WELL HSB137C (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241	<i>1.0E-01</i>	1	UI			GP							pCi/L
Carbon-14	<i>1.3E+02</i>	1		■		GP							pCi/L
Cobalt-60	<i>8.9E-01</i>	1	UI			GP							pCi/L
Curium-242	<i>-1.3E-02</i>	1	UI			GP							pCi/L
Curium-243/244	<i>1.9E-01</i>	1	UI			GP							pCi/L
Curium-245/246	<i>-2.4E-02</i>	1	UI			GP							pCi/L
Gross alpha	<i>4.3E+00</i>	1				GP	<i>7.7E-01</i>	1	UI			GP	pCi/L
Iodine-129	<i>9.8E+00</i>	1				GP							pCi/L
Nickel-63	<i>8.9E-01</i>		UI										pCi/L
Nonvolatile beta	<i>5.1E+01</i>	1		■		GP	<i>3.4E+01</i>	1				GP	pCi/L
Plutonium-238	<i>3.3E-01</i>	1	UJI			GP							pCi/L
Plutonium-239/240	<i>-1.4E-02</i>	1	UI			GP							pCi/L
Radium-226	<i>9.3E-01</i>	1	UI			GP							pCi/L
Radium-228	<i>2.8E+00</i>	1	UIV			GP							pCi/L
Strontium-90	<i>-6.9E-04</i>	1	UI			GP							pCi/L
Technetium-99	<i>1.7E+02</i>	1		■		GP							pCi/L
Thorium-228	<i>2.4E-01</i>	1	UI			GP							pCi/L
Thorium-230	<i>2.3E-01</i>	1	UI			GP							pCi/L
Thorium-232	<i>-8.2E-02</i>	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters	<i>3.1E+02</i>			■									pCi/L
Tritium	<i>9.3E+03</i>	1		■		GP	<i>9.3E+03</i>	1		■		GP	pCi/mL
Uranium-233/234	<i>-4.0E-02</i>	1	UI			GP							pCi/L
Uranium-235	<i>-4.0E-02</i>	1	UI			GP							pCi/L
Uranium-238	<i>0.0E+00</i>	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB137D

<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>
N72278.9 E55696.1	33.276508 °N 81.660542 °W	225.3-205.3 ft msl	236.6 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/16/97	10/23/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	220.0	218.8	ft msl
pH	4.8	4.4	pH
Sp. conductance	160	160	µS/cm
Water temperature	22.0	18.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	0	NTU
Volumes purged	3.9	8.5	well volumes
Sampling code			
Synchronous water level	220.7 (09/15/97)	221.07 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.11	1	JE			GE	<0.28	1	V			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	17,000	20	V	■		GE	19,000	20	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB137D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.7E+00	1				GP	9.0E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	5.1E+01	1		■		GP	1.1E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.6E+03	1		■		GP	3.7E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB138D

<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>
N73160.2 E55260.7	33.277746 °N 81.663400 °W	228.1-208.1 ft msl	252.4 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/15/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	222.6	220.2	ft msl
pH	5.4	4.9	pH
Sp. conductance	20	25	µS/cm
Water temperature	20.0	19.4	°C
Alkalinity as CaCO ₃	2	5	mg/L
Turbidity	7	2	NTU
Volumes purged	0.11	0.25	well volumes
Sampling code	XN	XN	
Synchronous water level	223.5 (09/15/97)	222.27 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	420	1	V			GE	720	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB138D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.0E-01	1	UI			GP	6.9E-01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.1E-01	1	UI			GP	1.1E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.5E+01	1				GP	2.3E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB139A

<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>
N71127.4 E57365.4	33.276684 °N 81.653910 °W	97.6-87.6 ft msl	233.7 ft msl	4" PVC	S	U. Congaree (IIA)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	173.2	172.4	ft msl
pH	6.6	7.2	pH
Sp. conductance	200	180	µS/cm
Water temperature	19.2	23.0	°C
Alkalinity as CaCO ₃	105	15	mg/L
Turbidity	0	0	NTU
Volumes purged	2.5	2.4	well volumes
Sampling code			
Synchronous water level	174.4 (09/15/97)	173.45 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	10	1	JE			GE	40	1	JE			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB139A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>3.8E-01</i>	1	UI			TM	<i>8.8E-01</i>	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>1.9E+00</i>	1				GP	<i>-5.1E-01</i>	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>7.0E-02</i>	1	UI			TM	<i>-2.3E-01</i>	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB139C

<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>
N71129.8 E57374.5	33.276704 °N 81.653890 °W	158.5-148.5 ft msl	233.8 ft msl	4" PVC	S	Barnwell (HIB1)

SAMPLE DATE	07/16/97	10/21/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	213.8	213.2	ft msl
pH	5.4	4.6	pH
Sp. conductance	320	300	µS/cm
Water temperature	20.0	18.0	°C
Alkalinity as CaCO ₃	8	2	mg/L
Turbidity	6	1	NTU
Volumes purged	0.023	0.024	well volumes
Sampling code	XN	XN	
Synchronous water level	214.1 (09/15/97)	214.4 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.67	1				GE	1.7	1	V			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	36,000	20	V	■		GE	34,000	20	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB139C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.5E+00	1				GP	4.2E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.4E+01	1				GP	2.2E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.4E+03	1		■		GP	2.4E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB139D

<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>
N71133.2 E57384.4	33.276728 °N 81.653871 °W	226.7-206.7 ft msl	233.8 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/14/97	10/13/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.6	219.7	ft msl
pH	5.0	4.7	pH
Sp. conductance	64	75	µS/cm
Water temperature	19.0	21.1	°C
Alkalinity as CaCO ₃	6	0	mg/L
Turbidity	1	1	NTU
Volumes purged	5.9	5.2	well volumes
Sampling code			
Synchronous water level	221.1 (09/15/97)	223.02 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.75	1	JV			GE	0.83	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	4,200	10	V			GE	5,700	10				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB139D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	4.6E+00	1				GP	8.5E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.4E+01	1				GP	7.5E+01	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.3E+02	1				GP	8.0E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB140A

<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>
N70050.3 E56535.4	33.272948 °N 81.654003 °W	91.0-81.0 ft msl	235.9 ft msl	4" PVC	S	U. Congaree (IIA)

<u>SAMPLE DATE</u>	07/17/97	10/08/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	175.0	174.8	ft msl
pH	6.4	6.7	pH
Sp. conductance	140	170	µS/cm
Water temperature	20.0	20.6	°C
Alkalinity as CaCO ₃	50	60	mg/L
Turbidity	2	0	NTU
Volumes purged	3.3	2.2	well volumes
Sampling code			
Synchronous water level	176.0 (09/15/97)	175.2 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	<40	1	V			GE	20	1	JE			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB140A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>4.0E-01</i>	1	UI			GP	1.3E+00	1	J			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>7.6E-01</i>	1	UI			GP	2.9E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	<i>-1.7E-02</i>	1	UI			GP	<i>-2.0E-02</i>	1	UI			TM	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB140C

<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>
N70049.2 E56551.8	33.272972 °N 81.653958 °W	171.6-161.6 ft msl	235.6 ft msl	4" PVC	S	Barnwell (IIB1)

SAMPLE DATE	07/14/97	10/08/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	205.0	204.6	ft msl
pH	5.6	5.5	pH
Sp. conductance	24	24	µS/cm
Water temperature	21.0	20.5	°C
Alkalinity as CaCO ₃	4	6	mg/L
Turbidity	1	1	NTU
Volumes purged	3.7	2.4	well volumes
Sampling code			
Synchronous water level	205.3 (09/15/97)	205.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.17	1	JV			GE	0.12	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	530	1	V			GE	550	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB140C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	8.4E-01	1	UI			GP	5.7E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	6.1E-01	1	UI			GP	5.8E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.2E+00	1				GP	3.3E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB140D

<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>
N70036.0 E56560.6	33.272957 °N 81.653909 °W	214.1-194.1 ft msl	236.2 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/17/97	10/08/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	211.1	210.4	ft msl
pH	5.0	4.7	pH
Sp. conductance	19	16	µS/cm
Water temperature	20.0	20.9	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	4	1	NTU
Volumes purged	4.8	3.6	well volumes
Sampling code			
Synchronous water level	212.3 (09/15/97)	211.15 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	460	1	V			GE	480	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB140D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.7E+00	1				GP	6.6E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.3E+00	1				GP	1.1E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	9.9E+00	1				GP	1.0E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB141A

<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>
N71213.6 E59168.7	33.279817 °N 81.649329 °W	90.6-80.6 ft msl	254.6 ft msl	4" PVC	S	U. Congaree (IIA)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	174.2	174.1	ft msl
pH	11.4	11.2	pH
Sp. conductance	3000	1200	µS/cm
Water temperature	21.0	24.0	°C
Alkalinity as CaCO ₃	367	201	mg/L
Turbidity	20	0	NTU
Volumes purged	0.016	1.9	well volumes
Sampling code	XN		
Synchronous water level	175.3 (09/15/97)	174.6 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.15	1	JE			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	70	1				GE	70	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB141A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.7E+00	1	UI			GP	1.1E+00	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.9E+00	1	UI			GP	2.6E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.9E+00	1				GP	1.6E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB141CR

<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>
N71226.7 E59167.2	33.279843 °N 81.649358 °W	162.1-152.1 ft msl	254.3 ft msl	4" PVC	S	Bamwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	228.0	226.7	ft msl
pH	5.6	8.6	pH
Sp. conductance	26	24	µS/cm
Water temperature	20.0	25.0	°C
Alkalinity as CaCO ₃	6	23	mg/L
Turbidity	1	1	NTU
Volumes purged	3.6	2.5	well volumes
Sampling code			
Synchronous water level	243.8 (09/15/97)	229.1 (12.18.97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.13	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	280	1				GE	140	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

Notes: Radionuclide results in italics are less than sample quantitation limit .
 ● = exceeded holding time
 ■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL HSB141CR (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	9.7E-01	1	J1			TM	3.7E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.9E+00	1				TM	1.5E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	8.5E-01	1				TM	1.1E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB141D

<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>
N71184.4 E59170.9	33.279756 °N 81.649266 °W	237.8-217.8 ft msl	254.8 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/02/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	240.2	236.5	ft msl
pH	5.2	4.6	pH
Sp. conductance	38	40	µS/cm
Water temperature	25.0	21.0	°C
Alkalinity as CaCO ₃	2	2	mg/L
Turbidity	243	26	NTU
Volumes purged	0.068	0.082	well volumes
Sampling code	XN	XN	
Synchronous water level	238.8 (09/15/97)	246.35 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	200	1				GE	190	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB141D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.2E+00	1				GP	1.8E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.7E+00	1				GP	7.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.5E+01	1				GP	1.2E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB142C

<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>
N73119.0 E53505.3	33.274791 °N 81.667942 °W	171.6-161.6 ft msl	204 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	197.8	197.7	ft msl
pH	5.4	4.2	pH
Sp. conductance	24	20	µS/cm
Water temperature	18.0	17.0	°C
Alkalinity as CaCO ₃	2	1	mg/L
Turbidity	6	2	NTU
Volumes purged	2.9	2.5	well volumes
Sampling code			
Synchronous water level	197.0 (09/11/97)	198.85 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	320	1				GE	290	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB142C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.9E-01	1	UI			GP	3.2E-02	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	4.8E-01	1	UI			GP	6.7E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	5.0E+00	1				GP	4.8E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB142D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone</u>	<u>Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N E	°N °W	ft msl	ft msl	204.2	4" PVC		Water Table (IIB2)
SAMPLE DATE		07/02/97					
<u>Parameter</u>		<u>3Q97</u>			<u>4Q97</u>		<u>Unit</u>
Water elevation		198.9					ft msl
pH							pH
Sp. conductance							µS/cm
Water temperature							°C
Alkalinity as CaCO ₃							mg/L
Turbidity							NTU
Volumes purged							well volumes
Sampling code		DN			D		
Synchronous water level		195.7 (09/11/97)			198.4 (12/18/97)		ft msl
ANALYTICAL DATA							
<i>Inorganic Constituents</i>							
<u>Parameter</u>		<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>
Antimony, total recoverable							
Arsenic, total recoverable							
Barium, total recoverable							
Cadmium, total recoverable							
Chromium, total recoverable							
Cobalt, total recoverable							
Copper, total recoverable							
Cyanide							
Lead, total recoverable							
Mercury, total recoverable							
Nickel, total recoverable							
Nitrate as nitrogen							
Nitrate-nitrite as nitrogen							
Selenium, total recoverable							
Silver, total recoverable							
Tin, total recoverable							
Vanadium, total recoverable							
Zinc, total recoverable							
<i>Organic Constituents</i>							
<u>Parameter</u>		<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>
Benzene							
Bis(2-ethylhexyl) phthalate							
Dichloromethane							
Tetrachloroethylene							
Trichloroethylene							
Trichlorofluoromethane							

Notes: Radionuclide results in italics are less than sample quantitation limit .
 ● = exceeded holding time
 ■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL HSB142D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha													
Iodine-129													
Nickel-63													
Nonvolatile beta													
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium													
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB143C

<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>
N73738.2 E52773.2	33.274966 °N 81.671072 °W	179.1-169.1 ft msl	222.2 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	207.4	207.1	ft msl
pH	5.2	5.2	pH
Sp. conductance	40	36	µS/cm
Water temperature	20.0	19.0	°C
Alkalinity as CaCO ₃	2	2	mg/L
Turbidity	3	1	NTU
Volumes purged	3.5	3.0	well volumes
Sampling code			
Synchronous water level	208.8 (09/15/97)	208.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	570	1				GE	470	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB143C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.5E-01	1	UI			GP	5.7E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	9.5E-01	1	UI			GP	2.2E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	7.7E+00	1				GP	7.3E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB143D

<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>
N73754.0 E52774.5	33.275003 °N 81.671099 °W	216.9-196.9 ft msl	222.9 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	211.3	210.4	ft msl
pH	4.6	4.8	pH
Sp. conductance	20	18	µS/cm
Water temperature	20.0	19.0	°C
Alkalinity as CaCO ₃	0	2	mg/L
Turbidity	1	7	NTU
Volumes purged	13	5.0	well volumes
Sampling code			
Synchronous water level	212.5 (09/15/97)	211.8 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.15	1	JV			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	370	1	V			GE	350	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

Notes: Radionuclide results in italics are less than sample quantitation limit.
● = exceeded holding time
■ = exceeded groundwater protection or monitoring constituent standard (See Appendix A.)

WELL HSB143D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.7E+00	1				GP	1.5E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.5E+00	1				GP	1.4E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	8.9E+00	1				GP	8.7E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB144A

<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>
N71892.1 E56200.5	33.276475 °N 81.658462 °W	88.6-78.6 ft msl	235.6 ft msl	4" PVC	S	U. Congaree (IIA)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	169.9	170.0	ft msl
pH	7.4	5.8	pH
Sp. conductance	100	165	µS/cm
Water temperature	22.0	20.1	°C
Alkalinity as CaCO ₃	5	54	mg/L
Turbidity	1	0	NTU
Volumes purged	2.5	2.7	well volumes
Sampling code			
Synchronous water level	171.2 (09/15/97)	170.35 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	150	1				GE	580	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB144A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	6.9E-01	1	UI			GP	1.7E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	2.0E+00	1				GP	7.0E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	6.1E+01	1		■		GP	1.0E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB145C

<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>
N71098.9 E57769.0	33.277280 °N 81.652792 °W	174.7-164.7 ft msl	235.7 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	212.9	212.2	ft msl
pH	5.6	5.1	pH
Sp. conductance	290	290	µS/cm
Water temperature	20.4	20.8	°C
Alkalinity as CaCO ₃	21	12	mg/L
Turbidity	1	1	NTU
Volumes purged	2.7	2.5	well volumes
Sampling code			
Synchronous water level	213.2 (09/11/97)	213.65 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.84	1				GE	0.98	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	32,000	40	V	■		GE	31,000	20	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB145C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	5.2E+00	1				GP	3.9E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.8E+01	1				GP	3.5E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.5E+03	1		■		GP	1.5E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB145D

<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>
N71088.0 E57753.9	33.277231 °N 81.652810 °W	194.2-184.2 ft msl	236.2 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	218.8	218.1	ft msl
pH	4.8	4.8	pH
Sp. conductance	260	240	µS/cm
Water temperature	21.0	23.0	°C
Alkalinity as CaCO ₃	4	10	mg/L
Turbidity	1	1	NTU
Volumes purged	3.3	5.4	well volumes
Sampling code			
Synchronous water level	218.7 (09/11/97)	221.55 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	3.2	1		■		GE	2.9	1		■		GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	30,000	40		■		GE	27,000	20	J	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB145D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.2E+01	1		■		GP	5.6E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.9E+02	1		■		GP	5.1E+02	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.4E+03	1		■		GP	2.1E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB146A

<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>
N70478.9 E58454.0	33.277026 °N 81.649784 °W	95.5-85.5 ft msl	251.6 ft msl	4" PVC	S	U. Congaree (IIA)

SAMPLE DATE	07/14/97	10/09/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	175.2	175.1	ft msl
pH	6.8	6.6	pH
Sp. conductance	140	140	µS/cm
Water temperature	20.0	19.0	°C
Alkalinity as CaCO ₃	66	37	mg/L
Turbidity	1	2	NTU
Volumes purged	2.5	2.3	well volumes
Sampling code			
Synchronous water level	176.2 (09/15/97)	175.6 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.11	1	JV			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	67	1	VY			WA	20	1	JE			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB146A (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.6E+00	1	V			TM	1.2E+00	1	J			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	4.7E-01	1	UI			GP	8.5E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	-8.0E-02	1	UI			TM	-2.1E-01	1	UI			GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB146C

<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>
N70471.6 E58473.1	33.277041 °N 81.649719 °W	162.3-152.3 ft msl	252.3 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	209.4	209.0	ft msl
pH	5.8	7.6	pH
Sp. conductance	56	68	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	17	38	mg/L
Turbidity	1	2	NTU
Volumes purged	3.6	0.027	well volumes
Sampling code		XN	
Synchronous water level	209.6 (09/15/97)	210.2 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	580	1	V			GE	590	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB146C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	6.3E-01	1	UI			GP	4.0E+00	1	J			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.2E+00	1	UI			GP	8.5E+01	1		■		GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.1E+01	1				GP	9.4E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB146D

<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>
N70469.7 E58493.0	33.277069 °N 81.649663 °W	224.1-204.0 ft msl	253.1 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	209.7	221.5	ft msl
pH	5.4	5.4	pH
Sp. conductance	18	18	µS/cm
Water temperature	21.0	20.0	°C
Alkalinity as CaCO ₃	0	23	mg/L
Turbidity	6	4	NTU
Volumes purged	0.53	0.087	well volumes
Sampling code	XN	XN	
Synchronous water level	221.3 (09/15/97)	223.3 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	530	1	V			GE	620	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB146D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	<i>5.6E-01</i>	1	UI			GP	1.2E+00	1	J			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	<i>4.5E-01</i>	1	UI			GP	3.6E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.3E+01	1				GP	1.3E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB147D

<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>
N73827.9 E55804.4	33.280110 °N 81.663265 °W	235.2-215.2 ft msl	267.3 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/18/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation		231.6	ft msl
pH	5.2	4.4	pH
Sp. conductance	54	30	µS/cm
Water temperature	20.0	18.0	°C
Alkalinity as CaCO ₃	4	1	mg/L
Turbidity	11	20	NTU
Volumes purged		0.093	well volumes
Sampling code	XN	XN	
Synchronous water level	231.1 (09/15/97)	227.9 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	260	1	V			GE	220	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB147D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.8E-01	1	UI			GP	6.8E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.1E+00	1				GP	3.6E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.0E+01	1				GP	8.8E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB148C

<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>
N70151.5 E55344.2	33.271228 °N 81.657336 °W	168.9-158.9 ft msl	250.9 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	201.5	201.0	ft msl
pH	8.0	10.3	pH
Sp. conductance	160	165	µS/cm
Water temperature	21.0	18.9	°C
Alkalinity as CaCO ₃	40	42	mg/L
Turbidity	4	1	NTU
Volumes purged	0.036	0.11	well volumes
Sampling code	XN	XN	
Synchronous water level	201.4 (09/15/97)	201.65 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.15	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	560	1	V			GE	500	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB148C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	8.2E-01	1	UI			GP	1.2E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.6E+00	1				GP	2.9E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.6E+00	1				GP	1.8E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB148D

<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>
N70160.9 E55355.7	33.271268 °N 81.657324 °W	218.1-198.1 ft msl	251.1 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	211.6	211.1	ft msl
pH	6.2	7.5	pH
Sp. conductance	260	150	µS/cm
Water temperature	20.0	19.3	°C
Alkalinity as CaCO ₃	65	48	mg/L
Turbidity	32	12	NTU
Volumes purged	0.0	0.12	well volumes
Sampling code	XN	XN	
Synchronous water level	212.4 (09/15/97)	221.8 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.14	1	JV			GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	120	1	V			GE	70	1				GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB148D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.3E+00	1				GP	1.9E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.4E+00	1				GP	2.0E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.1E+01	1				GP	1.1E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB149D

<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>
N71338.8 E57286.3	33.277023 °N 81.654529 °W	227.0-207.0 ft msl	240 ft msl	4" PVC	S	Water Table (11B2)

SAMPLE DATE	07/17/97	10/14/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	221.8	220.4	ft msl
pH	4.4	4.5	pH
Sp. conductance	20	19	µS/cm
Water temperature	20.0	21.4	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	2	10	NTU
Volumes purged	4.6	0.23	well volumes
Sampling code		XN	
Synchronous water level	222.0 (09/15/97)	222.92 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	200	1	V			GE	240	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB149D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.1E+00	1				GP	7.5E-01	1	UI			GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	6.7E-01	1	UI			GP	1.8E+00	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.5E+01	1		■		GP	2.7E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB150D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N71692.6 E58692.8	33.280100 °N 81.651512 °W	226.9-206.9 ft msl	239 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE	07/22/97	10/02/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	224.5	223.8	ft msl
pH	4.8	5.1	pH
Sp. conductance	32	37	µS/cm
Water temperature	22.0	23.1	°C
Alkalinity as CaCO ₃	2	5	mg/L
Turbidity	42	11	NTU
Volumes purged	0.086	0.18	well volumes
Sampling code	XN	XN	
Synchronous water level	224.5 (09/15/97)	230.9 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<10	1				GE							µg/L
Arsenic, total recoverable	<5.0	1				GE							µg/L
Barium, total recoverable	9.3	1				GE							µg/L
Cadmium, total recoverable	<5.0	1				GE							µg/L
Chromium, total recoverable	6.5	1				GE							µg/L
Cobalt, total recoverable	<5.0	1				GE							µg/L
Copper, total recoverable	29	1				GE							µg/L
Cyanide	<10	1				GE							µg/L
Lead, total recoverable	15	1				GE							µg/L
Mercury, total recoverable	<0.20	1				GE	<0.20	1				GE	µg/L
Nickel, total recoverable	3.9	1	JE			GE							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	250	1				GE	940	1	V			GE	µg/L
Selenium, total recoverable	<5.0	1				GE							µg/L
Silver, total recoverable	<5.0	1				GE							µg/L
Tin, total recoverable	<6.2	1	V			GE							µg/L
Vanadium, total recoverable	4.1	1	JE	■		GE							µg/L
Zinc, total recoverable	46	1	V			GE							µg/L

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB150D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241	2.2E-01	1	UJI			GP							pCi/L
Carbon-14	1.7E+00	1	UI			GP							pCi/L
Cobalt-60	2.0E+00	1	UI			GP							pCi/L
Curium-242	3.9E-01	1	UI			GP							pCi/L
Curium-243/244	8.1E-01	1	UI			GP							pCi/L
Curium-245/246	3.6E-01	1	UI			GP							pCi/L
Gross alpha	8.7E-01	1	UI			GP	4.7E-01	1	UI			GP	pCi/L
Iodine-129	1.3E+00	1	URI4			GP							pCi/L
Nickel-63	2.0E+00		UI										pCi/L
Nonvolatile beta	1.3E+00	1	UI			GP	4.0E-01	1	UI			GP	pCi/L
Plutonium-238	5.0E-01	1	UJI			GP							pCi/L
Plutonium-239/240	3.0E-01	1	UI			GP							pCi/L
Radium-226	2.4E-01	1	UI			GP							pCi/L
Radium-228	4.8E-02	1	UI			GP							pCi/L
Strontium-90	9.1E-02	1	UI			GP							pCi/L
Technetium-99	8.1E+00	1	UI			GP							pCi/L
Thorium-228	4.7E-02	1	UI			GP							pCi/L
Thorium-230	2.5E-01	1	R4			GP							pCi/L
Thorium-232	3.8E-02	1	UI			GP							pCi/L
Total alpha emitters													
Total beta emitters													
Tritium	1.3E+01	1				GP	7.8E+01	1		■		GP	pCi/mL
Uranium-233/234	2.3E-01	1	UI			GP							pCi/L
Uranium-235	8.4E-01	1	UI			GP							pCi/L
Uranium-238	0.0E+00	1	UI			GP							pCi/L

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

● = exceeded holding time

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

WELL HSB151C

<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>
N72997.9 E54014.9	33.275355 °N 81.666365 °W	180.6-170.6 ft msl	213.6 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	206.0	205.6	ft msl
pH	4.8	4.2	pH
Sp. conductance	96	90	µS/cm
Water temperature	20.0	18.0	°C
Alkalinity as CaCO ₃	2	1	mg/L
Turbidity	5	2	NTU
Volumes purged	3.0	3.0	well volumes
Sampling code			
Synchronous water level	205.2 (09/11/97)	208.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.11	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	8,600	10				GE	7,800	10	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB151C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.6E+00	1				GP	2.3E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.8E+01	1				GP	1.1E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.3E+03	1	V	■		GP	1.3E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB151D

<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>
N72997.8 E54026.4	33.275373 °N 81.666334 °W	207.6-197.6 ft msl	213.6 ft msl	4" PVC	S	Water Table (IIB2)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	205.2	204.8	ft msl
pH	4.6	4.6	pH
Sp. conductance	34	40	µS/cm
Water temperature	19.0	20.0	°C
Alkalinity as CaCO ₃	2	2	mg/L
Turbidity	378	180	NTU
Volumes purged	0.20	0.21	well volumes
Sampling code	XN	XN	
Synchronous water level	204.2 (09/11/97)	207.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.11	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,300	3				GE	2,000	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB151D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.4E+00	1				GP	7.0E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	4.2E+00	1				GP	8.0E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	6.9E+01	1	V	■		GP	5.3E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB152C

<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>
N72012.0 E54346.7	33.273716 °N 81.663576 °W	183.1-173.1 ft msl	214.1 ft msl	4" PVC	S	Barnwell (IIB1)

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

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	198.3	198.2	ft msl
pH	4.6	4.1	pH
Sp. conductance	100	150	µS/cm
Water temperature	18.0	18.4	°C
Alkalinity as CaCO ₃	2	0	mg/L
Turbidity	6	0	NTU
Volumes purged	3.0	2.9	well volumes
Sampling code			
Synchronous water level	198.1 (09/11/97)	199.1 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.27	1				GE	0.39	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	11,000	10		■		GE	11,000	10	V	■		GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB152C (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	2.6E+00	1				GP	1.3E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	3.9E+01	1				GP	4.6E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.1E+03	1	V	■		GP	1.1E+03	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSB152D

<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>
N72011.7 E54362.1	33.273740 °N 81.663535 °W	207.0-197.0 ft msl	214.1 ft msl	4" PVC	S	Water Table (IIB2)

SAMPLE DATE 10/16/97

FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation		4.0	
pH		65	
Sp. conductance		18.8	
Water temperature		4	
Alkalinity as CaCO ₃		216.0	
Turbidity			
Volumes purged			
Sampling code		XNS	
Synchronous water level		204.32 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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							0.15	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen							2,300	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSB152D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha							3.3E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta							5.4E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium							2.2E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSL 1D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72179.6 E58925.0	33.281556 °N 81.651846 °W	239.8-219.8 ft msl	264 ft msl	2" PVC	V	Water Table (H2B2)

SAMPLE DATE	07/21/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	233.3	232.4	ft msl
pH	4.2	4.0	pH
Sp. conductance	56	60	µS/cm
Water temperature	22.0	21.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	1	1	NTU
Volumes purged	10	13	well volumes
Sampling code			
Synchronous water level	234.1 (09/15/97)	234.35 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.35	1				GE	0.33	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	3,500	5				GE	3,000	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSL 1D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.5E+00	1				GP	6.3E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.6E+01	1				GP	1.3E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	4.3E+01	1		■		GP	6.1E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSL 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>
N72190.8 E59423.5	33.282394 °N 81.650556 °W	245.3-225.2 ft msl	265.5 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/22/97	10/27/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	240.0	239.6	ft msl
pH	5.0	4.4	pH
Sp. conductance	42	44	µS/cm
Water temperature	21.0	19.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	0	1	NTU
Volumes purged	11	5.9	well volumes
Sampling code			
Synchronous water level	240.9 (09/15/97)	241.45 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.13	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	880	1				GE	770	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSL 2D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	3.8E-01	1	UI			GP	1.2E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.3E+00	1	UI			GP	7.7E-01	1	UI			GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.4E+01	1		■		GP	2.4E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSL 3D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72251.5 E59770.6	33.283094 °N 81.649759 °W	253.8-233.7 ft msl	267.6 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE	08/20/97	10/27/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	247.8	247.4	ft msl
pH	4.0	4.4	pH
Sp. conductance	36	40	µS/cm
Water temperature	21.0	18.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	4	2	NTU
Volumes purged	7.8	4.0	well volumes
Sampling code			
Synchronous water level	249.1 (09/15/97)	250.8 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable	<19	1	Y			WA							µg/L
Arsenic, total recoverable	<32	1	Y			WA							µg/L
Barium, total recoverable	5.4	1	JEY			WA							µg/L
Cadmium, total recoverable	<23	1	Y			WA							µg/L
Chromium, total recoverable	<66	1	Y			WA							µg/L
Cobalt, total recoverable	<48	1	Y			WA							µg/L
Copper, total recoverable	5.6	1	JE			WA							µg/L
Cyanide	<15	1	Y			WA							µg/L
Lead, total recoverable	<47	1	Y			WA							µg/L
Mercury, total recoverable	<0.70	1	Y			WA	0.14	1	JE			GE	µg/L
Nickel, total recoverable	<120	1	Y			WA							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,600	2	V			WA	1,600	1	V			GE	µg/L
Selenium, total recoverable	<16	1	Y			WA							µg/L
Silver, total recoverable	<65	1	Y			WA							µg/L
Tin, total recoverable													
Vanadium, total recoverable	<4.3	1	VY			WA							µg/L
Zinc, total recoverable	<200	1	Y			WA							µg/L

Organic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Benzene	<5.0	1	Y			WA							µg/L
Bis(2-ethylhexyl) phthalate	1.1	1	JE			WA							µg/L
Dichloromethane	<5.0	1	Y			WA							µg/L
Tetrachloroethylene	<5.0	1	Y			WA							µg/L
Trichloroethylene	<5.0	1	Y			WA							µg/L
Trichlorofluoromethane													

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

● = exceeded holding time

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

WELL HSL 3D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241													
Carbon-14	<i>7.7E+01</i>	1	UI			TM							pCi/L
Cobalt-60	<i>-6.7E-01</i>	1	UI			TM							pCi/L
Curium-242	<i>0.0E+00</i>	1	UI			TM							pCi/L
Curium-243/244	<i>5.0E-02</i>	1	UI			TM							pCi/L
Curium-245/246													
Gross alpha	<i>1.7E+00</i>	1	J			TM	<i>1.1E+00</i>	1				GP	pCi/L
Iodine-129	<i>2.6E+01</i>	1	R4			TM							pCi/L
Nickel-63	<i>-6.7E-01</i>		UI										pCi/L
Nonvolatile beta	<i>5.9E+00</i>	1	JV			TM	<i>1.8E+00</i>	1				GP	pCi/L
Plutonium-238	<i>1.4E-01</i>	1	UI			TM							pCi/L
Plutonium-239/240	<i>0.0E+00</i>	1	UI			TM							pCi/L
Radium-226	<i>2.1E-01</i>	1	UIV			TM							pCi/L
Radium-228	<i>2.9E-01</i>	1	UI			TM							pCi/L
Strontium-90	<i>0.0E+00</i>	1	UI			TM							pCi/L
Technetium-99	<i>3.4E-01</i>	1	UI			TM							pCi/L
Thorium-228	<i>4.0E-02</i>	1	UI			TM							pCi/L
Thorium-230	<i>2.1E-01</i>	1	UI			TM							pCi/L
Thorium-232	<i>0.0E+00</i>	1	UI			TM							pCi/L
Total alpha emitters	<i>2.8E-01</i>												pCi/L
Total beta emitters													
Tritium	<i>2.0E+02</i>	1		■		TM	<i>1.7E+02</i>	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235	<i>2.8E-01</i>	1	J			TM							pCi/L
Uranium-238	<i>9.0E-02</i>	1	UI			TM							pCi/L

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

● = exceeded holding time

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

WELL HSL 4D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72453.7 E60171.9	33.284196 °N 81.649095 °W	265.1-245.0 ft msl	273.2 ft msl	2" PVC	V	Water Table (IIB2)

<u>SAMPLE DATE</u>	08/08/97	10/16/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	260.5	263.2	ft msl
pH	5.4	5.2	pH
Sp. conductance	66	64	µS/cm
Water temperature	20.0	20.0	°C
Alkalinity as CaCO ₃	9	16	mg/L
Turbidity	1	1	NTU
Volumes purged	7.5	7.4	well volumes
Sampling code			
Synchronous water level	261.8 (09/15/97)	263.7 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable	<19	1				WA							µg/L
Arsenic, total recoverable	<32	1				WA							µg/L
Barium, total recoverable	25	1				WA							µg/L
Cadmium, total recoverable	<23	1				WA							µg/L
Chromium, total recoverable	<66	1				WA							µg/L
Cobalt, total recoverable	<48	1				WA							µg/L
Copper, total recoverable	<46	1				WA							µg/L
Cyanide	<15	1				WA							µg/L
Lead, total recoverable	<47	1				WA							µg/L
Mercury, total recoverable	<0.20	1				GE	0.25	1				GE	µg/L
Nickel, total recoverable	<120	1				WA							µg/L
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	650	1	V			GE	520	1	V			GE	µg/L
Selenium, total recoverable	<2.2	1	V			WA							µg/L
Silver, total recoverable	<65	1				WA							µg/L
Tin, total recoverable													
Vanadium, total recoverable	<4.3	1	V			WA							µg/L
Zinc, total recoverable	<200	1				WA							µg/L

Organic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Benzene	<5.0	1				WA							µg/L
Bis(2-ethylhexyl) phthalate	<5.1	1	V			WA							µg/L
Dichloromethane	1.7	1	JE			WA							µg/L
Tetrachloroethylene	<5.0	1				WA							µg/L
Trichloroethylene	<5.0	1				WA							µg/L
Trichlorofluoromethane													

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

● = exceeded holding time

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

WELL HSL 4D (cont.)

ANALYTICAL DATA

Radioactive Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Americium-241													
Carbon-14	3.9E+01	1	UI			TM							pCi/L
Cobalt-60	4.6E-01	1	UI			TM							pCi/L
Curium-242	0.0E+00	1	UI			TM							pCi/L
Curium-243/244	1.1E-01	1	UI			TM							pCi/L
Curium-245/246													
Gross alpha	2.2E+00	1				GP	4.2E-01	1	UI			GP	pCi/L
Iodine-129	1.4E+01	1	UI			TM							pCi/L
Nickel-63	4.6E-01		UI										pCi/L
Nonvolatile beta	7.0E+01	1	JV	■		TM	6.9E+01	1		■		GP	pCi/L
Plutonium-238	9.5E-01	1				TM							pCi/L
Plutonium-239/240	5.0E-02	1	UI			TM							pCi/L
Radium-226	2.9E-01	1	J1			TM							pCi/L
Radium-228	2.5E-01	1	UI			TM							pCi/L
Strontium-90	2.5E+01	1		■		TM							pCi/L
Technetium-99	2.4E+00	1	UI			TM							pCi/L
Thorium-228	5.0E-02	1	UI			TM							pCi/L
Thorium-230	6.4E-01	1				TM							pCi/L
Thorium-232	9.0E-02	1	UI			TM							pCi/L
Total alpha emitters	2.1E+00												pCi/L
Total beta emitters	2.5E+01												pCi/L
Total radium													
(Ra-226 plus Ra-228)	2.9E-01												pCi/L
Tritium	1.9E+01	1				GP	1.7E+01	1				GP	pCi/mL
Uranium-233/234													
Uranium-235	5.0E-02	1	UJI			TM							pCi/L
Uranium-238	5.2E-01	1	J1			TM							pCi/L

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

● = exceeded holding time

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

WELL HSL 5D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72562.2 E60339.4	33.284709 °N 81.648865 °W	267.7-247.8 ft msl	276.6 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/21/97	10/15/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	266.8	259.6	ft msl
pH	4.8	4.6	pH
Sp. conductance	38	28	µS/cm
Water temperature	25.0	28.0	°C
Alkalinity as CaCO ₃	4	7	mg/L
Turbidity	2	5	NTU
Volumes purged	7.7	4.1	well volumes
Sampling code			
Synchronous water level	266.2 (09/15/97)	268.25 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.13	1	JE			GE	0.12	1	JE			GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	1,800	1				GE	870	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSL 5D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.0E+00	1				GP	5.1E-011	UI				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.5E+01	1				GP	1.1E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.1E+01	1				GP	5.3E+00	1				GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSL 6D

SRS Coord.	Lat/Longitude	Screen Zone Elevation	Top of Casing	Casing	Pump	Screen Zone
N72659.7 E60531.1	33.285238 °N 81.648549 °W	264.0-243.9 ft msl	280 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/22/97	10/16/97
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FIELD DATA

Parameter	3Q97	4Q97	Unit
Water elevation	259.7	257.4	ft msl
pH	4.0	3.8	pH
Sp. conductance	86	100	µS/cm
Water temperature	22.0	21.0	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	13	3	NTU
Volumes purged	8.1	7.7	well volumes
Sampling code			
Synchronous water level	259.7 (09/15/97)	261.45 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

Parameter	3Q97	DF	Mod	ST	H	Lab	4Q97	DF	Mod	ST	H	Lab	Unit
Antimony, total recoverable													
Arsenic, total recoverable													
Barium, total recoverable													
Cadmium, total recoverable													
Chromium, total recoverable													
Cobalt, total recoverable													
Copper, total recoverable													
Cyanide													
Lead, total recoverable													
Mercury, total recoverable	0.46	1				GE	0.41	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	680	1				GE	1,200	1	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSL 6D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	8.4E+00	1				GP	1.2E+01	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	4.5E+01	1				GP	4.6E+01	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	2.2E+01	1		■		GP	2.5E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSL 7D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72674.4 E60723.0	33.285583 °N 81.648073 °W	262.4-242.3 ft msl	283.8 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/22/97	10/16/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	258.7	257.3	ft msl
pH	4.2	3.3	pH
Sp. conductance	42	45	µS/cm
Water temperature	21.0	19.2	°C
Alkalinity as CaCO ₃	0	0	mg/L
Turbidity	6	412	NTU
Volumes purged	10	0.41	well volumes
Sampling code		XNT	
Synchronous water level	259.3 (09/15/97)	259.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	<0.20	1				GE	0.29	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	2,400	5				GE	2,100	3	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSL 7D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	8.0E-01	1				GP	2.2E+01	1		■		GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	1.7E+00	1				GP	8.0E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	3.8E+01	1				GP	3.7E+01	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

WELL HSL 8D

<u>SRS Coord.</u>	<u>Lat/Longitude</u>	<u>Screen Zone Elevation</u>	<u>Top of Casing</u>	<u>Casing</u>	<u>Pump</u>	<u>Screen Zone</u>
N72688.1 E61117.1	33.286257 °N 81.647061 °W	268.4-248.4 ft msl	288.7 ft msl	2" PVC	V	Water Table (IIB2)

SAMPLE DATE	07/23/97	10/16/97
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FIELD DATA

<u>Parameter</u>	<u>3Q97</u>	<u>4Q97</u>	<u>Unit</u>
Water elevation	259.3	258.4	ft msl
pH	4.6	3.9	pH
Sp. conductance	78	66	µS/cm
Water temperature	25.0	20.7	°C
Alkalinity as CaCO ₃	1	3	mg/L
Turbidity	4	7	NTU
Volumes purged	0.56	0.61	well volumes
Sampling code	XN	XN	
Synchronous water level	260.5 (09/15/97)	259.95 (12/18/97)	ft msl

ANALYTICAL DATA

Inorganic Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Antimony, total recoverable													
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	0.32	1				GE	0.46	1				GE	µg/L
Nickel, total recoverable													
Nitrate as nitrogen													
Nitrate-nitrite as nitrogen	7,300	5	V			GE	6,900	5	V			GE	µg/L
Selenium, total recoverable													
Silver, total recoverable													
Tin, total recoverable													
Vanadium, total recoverable													
Zinc, total recoverable													

Organic Constituents

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

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

● = exceeded holding time

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

WELL HSL 8D (cont.)

ANALYTICAL DATA

Radioactive Constituents

<u>Parameter</u>	<u>3Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>4Q97</u>	<u>DF</u>	<u>Mod</u>	<u>ST</u>	<u>H</u>	<u>Lab</u>	<u>Unit</u>
Americium-241													
Carbon-14													
Cobalt-60													
Curium-242													
Curium-243/244													
Curium-245/246													
Gross alpha	1.6E+00	1				GP	1.7E+00	1				GP	pCi/L
Iodine-129													
Nickel-63													
Nonvolatile beta	7.9E+00	1				GP	7.6E+00	1				GP	pCi/L
Plutonium-238													
Plutonium-239/240													
Radium-226													
Radium-228													
Strontium-90													
Technetium-99													
Thorium-228													
Thorium-230													
Thorium-232													
Total alpha emitters													
Total beta emitters													
Tritium	1.2E+02	1		■		GP	1.0E+02	1		■		GP	pCi/mL
Uranium-233/234													
Uranium-235													
Uranium-238													

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

● = exceeded holding time

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

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Appendix D

Time Series Plots

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

Mercury Concentrations Well HSB 83D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 2 µg/L

—■— HSB 83D (W) - - - - - GWPS

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

Mercury Concentrations Well HSB101D

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

Mercury Concentrations Well HSB102D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 2 µg/L

—■— HSB102D (W)GWPS

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

Mercury Concentrations Well HSB103D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 2 µg/L

—■— HSB103D (W) - - - - - GWPS

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

Mercury Concentrations Well HSB104D

Unconnected data points indicate intervals of dry wells or values below the detection limit.

GWPS 2 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)

H-Area HWMF

D - 8

Third and Fourth Quarter 1997

Mercury Concentrations Well Cluster HSB105

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

Mercury Concentrations Well HSB106D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.

GWPS 2 µg/L

—■— HSB106D (W)GWPS

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

Mercury Concentrations Well HSB108D

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

Mercury Concentrations Well HSB116C

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 2 µg/L

—▲— HSB116C (B)GWPS

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

Mercury Concentrations Well HSB125D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 2 µg/L

—■— HSB125D (W) - - - - - GWPS

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

Mercury Concentrations Well Cluster HSB127

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 2 µg/L

—■— HSB127D (W) —▲— HSB127C (B)GWPS

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

Mercury Concentrations Well HSB145D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 2 µg/L

—■— HSB145D (W) GWPS

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

Tritium Activities Well Cluster HSB 84

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 HSB102

H-Area HWMF

D - 17

Third and Fourth Quarter 1997

Note: W=Water Table (11B2); B=Bamwell (11B1); M=McBean (11B1); UC=Upper Congaree (11A); MC=Middle Congaree (11A); LC=Lower Congaree (11A)

Tritium Activities Well HSB104D

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 20 pCi/mL

—■— HSB104D (W)GWPS

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

Tritium Activities Well HSB108D

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 HSB111

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 HSB117

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

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

H-Area HWMF

D - 22

Third and Fourth Quarter 1997

Tritium Activities Well HSB127D

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 HSB129

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 HSB138D

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 HSB144A

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 HSB145D

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 HSB151C

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 HSB 68

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 HSB 70

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 HSB101D

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 HSB106D

Unconnected lines indicate
a dry well or a value below
the detection limit.
GWPS 10,000 µg/L

—■— HSB106D (W) GWPS

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

Nitrate Concentrations Well Cluster HSB107

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

Nitrate Concentrations Well Cluster HSB108

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 HSB111

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

Nitrate Concentrations Well Cluster HSB114

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 HSB118A

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 HSB135D

Unconnected lines indicate
a dry well or a value below
the detection limit.
GWPS 10,000 µg/L

—■— HSB135D (W) GWPS

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

Nitrate Concentrations Well Cluster HSB139

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 HSB145

—■— HSB145D (W) —▲— HSB145C (B)GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Nitrate Concentrations Well HSB151C

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well HSB 69

Unconnected data points indicate intervals of dry wells or values below the detection limit.

—■— HSB 69 (W)GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB 84

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB 86

Unconnected data points
indicate intervals of dry wells or
values below the detection limit.

—■— HSB 86D (W) —▲— HSB 86C (B) —◆— HSB 86B (M) GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB100

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB104

Unconnected data points indicate intervals of dry wells or values below the detection limit.

—■— HSB104D (W) —▲— HSB104C (B) - - - - - GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB105

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB106

—■— HSB106D (W) —▲— HSB106C (B) - - - - - GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB107

Unconnected data points indicate intervals of dry wells or values below the detection limit.

—■— HSB107D (W) —▲— HSB107C (B) - - - - - GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB113

Unconnected data points indicate intervals of dry wells or values below the detection limit.

■ HSB113D (W) ▲ HSB113C (B) GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB114

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB115

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB136

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Iodine-129 Activities Well Cluster HSB145

Unconnected data points indicate intervals of dry wells or values below the detection limit.

■ HSB145D (W) ▲ HSB145C (B) GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Strontium-90 Activities Well HSB 69

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 HSB 84

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 HSB 86

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 HSB100

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 8 pCi/L

—■— HSB100D (W) —▲— HSB100C (B) - - - - - GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Strontium-90 Activities Well Cluster HSB104

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 HSB105

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 HSB106

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 HSB107

Unconnected data points indicate intervals of dry wells or values below the detection limit.
GWPS 8 pCi/L

—■— HSB107D (W) —▲— HSB107C (B) - - - - - GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Strontium-90 Activities Well Cluster HSB113

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 HSB114

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.

GWPS 8 pCi/L

—■— HSB114D (W) —▲— HSB114C (B) - - - - - GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Strontium-90 Activities Well Cluster HSB115

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 HSB136

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 HSB145

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 HSB 71

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 HSB 83D

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 HSB 84

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 HSB 86

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 HSB101D

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 HSB104D

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 HSB106D

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 HSB111D

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 HSB112D

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 HSB114

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 HSB116

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 HSB117

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 HSB125D

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 HSB136

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 HSB 69

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 HSB 84

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 HSB 86

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 HSB100

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 HSB104

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 HSB105

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 HSB106

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Nonvolatile Beta Activities Well Cluster HSB107

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 HSB113

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 HSB114

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 HSB115

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

D - 92

Third and Fourth Quarter 1997

Nonvolatile Beta Activities Well Cluster HSB136

Unconnected data points indicate
intervals of dry wells or values
below the detection limit.
GWPS 50 pCi/L

■ HSB136D (W) ▲ HSB136C (B) - - - - - GWPS

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Nonvolatile Beta Activities Well Cluster HSB145

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Appendix E

Hydrographs

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Hydrograph Well Cluster HSB 65

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IIA); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well HSB 66

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well HSB 67

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 HSB 68

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 HSB 69

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 HSB 70

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 HSB 71

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 HSB 83

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 HSB 84

Note: W=Water Table (IB1); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well Cluster HSB 85

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 HSB 86

Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well Cluster HSB100

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 HSB101

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 HSB102

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 HSB103

---■--- HSB103D (W) ---▲--- HSB103C (B)

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 HSB104

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 HSB105

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 HSB106

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 HSB107

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 HSB108

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 HSB109

—■— HSB109D (W) —▲— HSB109C (B)

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E -23

Third and Fourth Quarter 1997

Hydrograph Well Cluster HSB110

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 HSB111

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 HSB112

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 HSB113

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 HSB114

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 HSB115

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 HSB116

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 HSB117

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 HSB118A

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 HSB119A

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E - 33

Third and Fourth Quarter 1997

Hydrograph Well HSB120A

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 HSB121A

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E - 35

Third and Fourth Quarter 1997

Hydrograph Well HSB122A

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 HSB123A

Note: W=Water Table (IB2); B=Barnwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E - 37

Third and Fourth Quarter 1997

Hydrograph Well HSB124AR

Note: W=Water Table (IB2); B=Bamwell (IB1); M=McBean (IB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well Cluster HSB125

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 HSB126

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 HSB127

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 HSB129

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 HSB130

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 HSB131

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 HSB132

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 HSB133

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 HSB134

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 HSB135

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 HSB136

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 HSB137

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 HSB138D

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E - 51

Third and Fourth Quarter 1997

Hydrograph Well Cluster HSB139

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 HSB140

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 HSB141

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 HSB142

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 HSB143

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 HSB144A

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 HSB145

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 HSB146

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 HSB147D

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E - 60

Third and Fourth Quarter 1997

Hydrograph Well Cluster HSB148

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 HSB149D

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 HSB150D

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 HSB151

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E - 64

Third and Fourth Quarter 1997

Hydrograph Well Cluster HSB152

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 HSL 1D

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

Hydrograph Well HSL 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 HSL 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 HSL 4D

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E - 69

Third and Fourth Quarter 1997

Hydrograph Well HSL 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 HSL 6D

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 HSL 7D

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

H-Area HWMF

E -72

Third and Fourth Quarter 1997

Hydrograph Well HSL 8D

Note: W=Water Table (IIB2); B=Barnwell (IIB1); M=McBean (IIB1); UC=Upper Congaree (IIA); MC=Middle Congaree (IIA); LC=Lower Congaree (IIA)

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Appendix F

Shewhart-CUSUM Charts

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Non-Organics

AGTOT - Silver
ASTOT - Arsenic
BATOT - Barium
CDTOT - Cadmium
COTOT - Cobalt
CRTOT - Chromium
CUTOT - Copper
CYN - Cyanide
HGTOT - Mercury
NITOT - Nickel
NO3NO2 - Nitrate/Nitrite
PBTOT - Lead
SBTOT - Antimony
SETOT - Selenium
TLTOT - Thallium
VTOT - Vanadium
ZNTOT - Zinc

Organics

B2EHP - Bis (2-ethylhexyl) phthalate
C6H6 - Benzene
CCL3F - Trichlorofluoromethane
CH2CL2 - Methylene chloride
PHENOL - Phenols
TCLEE - Tetrachloroethylene
TRCLE - Trichloroethylene

Radionuclides

ALPHAG - Gross Alpha
AM241 - Americium-241
BETAG - Gross Beta (Nonvolatile Beta)
C14 - Carbon-14
CM242 - Curium-242
CM4344 - Curium-243/244
CM4546 - Curium-245/246
CO60 - Cobalt-60
CS137 - Cesium-137
I129 - Iodine-129
NI63 - Nickel-63
PU238 - Plutonium-238
PU3940 - Plutonium-239/240
RA226 - Radium-226
RA228 - Radium-228
SR90 - Strontium-90
TC99 - Technetium-99
TH228 - Thorium-228
TH230 - Thorium-230
TH232 - Thorium-232
TOTRAD - Total Radium
TRITIUM - Tritium
U235 - Uranium-235
U238 - Uranium-238
U3334 - Uranium-233/234

Combined Shewhart-CUSUM Chart

Well HSB100C
W. Statistic =0.84430

Analyte CH2CL2
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB100C
W. Statistic =0.85740

Analyte ZNTOT
W. Quantile =0.79200

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.84450

Analyte B2EHP
W. Quantile =0.74900

Background Data Summary: Mean=0.471E+01 STD.DEV =0.321E+01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.94330

Analyte BATOT
W. Quantile =0.80500

Background Data Summary: Mean=0.200E+02 STD.DEV =0.418E+01 No.Samps. = 12

STD. Mean O
+CUSUM +
-CUSUM X

I-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.98220

Analyte BETAG
W. Quantile =0.87300

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.86560

Analyte CH2CL2
W. Quantile =0.80500

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.97100

Analyte SR90
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.92200

Analyte TC99
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.96450

Analyte TRITIUM
W. Quantile =0.87300

Background Data Summary: Mean=0.503E+03 STD.DEV =0.280E+03 No.Samps. = 21

Combined Shewhart-CUSUM Chart

Well HSB100D
W. Statistic =0.93280

Analyte ZNTOT
W. Quantile =0.80500

Background Data Summary: Mean=0.815E+02 STD.DEV =0.265E+02 No.Samps. = 12

STD. Mean O
+CUSUM +
-CUSUM X

Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB101C

W. Statistic =0.91950

Analyte BATOT

W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well HSB101C

W. Statistic =0.93100

Analyte BETAG

W. Quantile =0.84400

STD. Mean O

+CUSUM +

-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB101C

W. Statistic =0.89660

Analyte CH₂CL₂

W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well HSB101C

W. Statistic =0.85790

Analyte TC99

W. Quantile =0.79200

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB101C
W. Statistic =0.97450

Analyte TRITIUM
W. Quantile =0.87800

Combined Shewhart-CUSUM Chart

Well HSB101C
W. Statistic =0.88200

Analyte ZNTOT
W. Quantile =0.80500

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB101D
W. Statistic = 0.95710

Analyte ASTOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well HSB101D
W. Statistic = 0.93680

Analyte BETAG
W. Quantile = 0.86800

STD. Mean O
+CUSUM +
-CUSUM X

Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB101D
W. Statistic =0.90270

Analyte CRTOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB101D
W. Statistic =0.92720

Analyte TRITIUM
W. Quantile =0.86800

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB101D
W. Statistic =0.91210

Analyte U238
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB101D
W. Statistic =0.90500

Analyte U3334
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

1-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Analyte HGTOT
W. Quantile =0.82500

Combined Shewhart-CUSUM Chart

Analyte TC99
W. Quantile =0.74900

Background Data Summary: Mean=0.148E+00 STD.DEV =0.154E+00No.Samps. = 8

STD. Mean	O
+CUSUM	+
-CUSUM	X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB103C
W. Statistic =0.93900

Analyte ALPHAG
W. Quantile =0.85100

1Q96 1Q97 1Q98 1Q99 1Q00 1Q01 1Q02
Background Data Summary: Mean=0.447E-02 STD.DEV =0.212E-02 No.Samps. = 17

Combined Shewhart-CUSUM Chart

Well HSB103C
W. Statistic =0.90660

Analyte BATOT
W. Quantile =0.76400

1Q96 1Q97 1Q98 1Q99 1Q00 1Q01 1Q02
Background Data Summary: Mean=0.664E+02 STD.DEV =0.450E+01 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB103C
W. Statistic =0.85890

Analyte NITOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB103C
W. Statistic =0.84850

Analyte TC99
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB103C
W. Statistic =0.86120

Analyte TCLEE
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well HSB103C
W. Statistic =0.95620

Analyte TRCLE
W. Quantile =0.80500

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB103D

W. Statistic =0.91760

Analyte ALPHAG

W. Quantile =0.85800

Combined Shewhart-CUSUM Chart

Well HSB103D

W. Statistic =0.84250

Analyte BATOT

W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB103D
W. Statistic = 0.91730

Analyte BETAG
W. Quantile = 0.86300

Combined Shewhart-CUSUM Chart

Well HSB103D
W. Statistic = 0.89710

Analyte CO60
W. Quantile =0.80500

STD. Mean	O
+CUSUM	+
-CUSUM	X
<i>l</i> -Area HWMF	

Combined Shewhart-CUSUM Chart

Well HSB103D
W. Statistic =0.90560

Analyte HGTOT
W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well HSB103D
W. Statistic =0.83350

Analyte NITOT
W. Quantile =0.76400

STD. Mean O

+CUSUM +

-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB103D
W. Statistic = 0.86130

Analyte RA228
W. Quantile = 0.76400

Background Data Summary: Mean = -.522E+01 STD.DEV = 0.192E+01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB103D
W. Statistic = 0.92110

Analyte SR90
W. Quantile = 0.78100

Background Data Summary: Mean = 0.221E+00 STD.DEV = 0.135E+00 No.Samps. = 10

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB103D
W. Statistic =0.92290

Analyte TRITIUM
W. Quantile =0.86300

Combined Shewhart-CUSUM Chart

Well HSB104C
W. Statistic =0.89560

Analyte CH2CL2
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB104C
W. Statistic =0.82770

Analyte TC99
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB104C
W. Statistic =0.84460

Analyte TCLEE
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB104D
W. Statistic =0.97360

Analyte CO60
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB104D
W. Statistic =0.87570

Analyte CUTOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

1-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB104D
W. Statistic =0.97350

Analyte HGTOT
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well HSB104D
W. Statistic =0.88300

Analyte NITOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM *

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB104D
W. Statistic =0.89490

Analyte TC99
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB104D
W. Statistic =0.95890

Analyte TRITIUM
W. Quantile =0.86300

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB105C
W. Statistic =0.87610

Analyte TC99
W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well HSB105C
W. Statistic =0.88320

Analyte TCLEE
W. Quantile =0.83500

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB105D
W. Statistic =0.87920

Analyte BATOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB105D
W. Statistic =0.84250

Analyte CH2CL2
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB105D
W. Statistic =0.87270

Analyte I129
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB105D
W. Statistic =0.91150

Analyte RA226
W. Quantile =0.79200

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB105D

W. Statistic =0.84960

Analyte SR90

W. Quantile =0.76400

Background Data Summary: Mean=0.970E+00 STD.DEV =0.693E+00No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB105D

W. Statistic =0.86940

Analyte TC99

W. Quantile =0.74900

Background Data Summary: Mean=-.143E+01 STD.DEV =0.284E+01No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB105D
W. Statistic =0.85290

Analyte ZNTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.328E+02 STD.DEV =0.151E+02No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB106C
W. Statistic =0.88620

Analyte BATOT
W. Quantile =0.76400

Background Data Summary: Mean=0.153E+02 STD.DEV =0.131E+01No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well **HSB106C**
W. Statistic =0.93050

Analyte **BETAG**
W. Quantile =0.85100

Combined Shewhart-CUSUM Chart

Well **HSB106C**
W. Statistic =0.90360

Analyte **CH2CL2**
W. Quantile =0.80500

STD. Mean o
+CUSUM +
-CUSUM x
H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB106C
W. Statistic =0.93020

Analyte HGTOT
W. Quantile =0.82500

Combined Shewhart-CUSUM Chart

Well HSB106C
W. Statistic =0.93050

Analyte TCLEE
W. Quantile =0.84400

STD. Mean	O
+CUSUM	+
-CUSUM	X
<i>l-Area HWMF</i>	

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O

+CUSUM +

-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB107C
W. Statistic = 0.95630

Analyte BATOT
W. Quantile = 0.78100

Combined Shewhart-CUSUM Chart

Well HSB107C
W. Statistic = 0.85100

Analyte CH2CL2
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB107C
W. Statistic =0.88430

Analyte SR90
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB107C
W. Statistic =0.91020

Analyte TC99
W. Quantile =0.74900

STD. Mean O

+CUSUM +

-CUSUM X

H-Area HWMF

F - 41

Third and Fourth Quarter, 1997

Combined Shewhart-CUSUM Chart

Well HSB107C
W. Statistic =0.97160

Analyte TCLEE
W. Quantile =0.79200

Combined Shewhart-CUSUM Chart

Well HSB107C
W. Statistic =0.85420

Analyte ZNTOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X
4-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB107D
W. Statistic =0.86860

Analyte CO60
W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well HSB107D
W. Statistic =0.96020

Analyte HGTOT
W. Quantile =0.80500

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB107D
W. Statistic =0.90350

Analyte SR90
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB107D
W. Statistic =0.97480

Analyte TRITIUM
W. Quantile =0.86300

STD. Mean O

+CUSUM +

-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB108C
W. Statistic =0.84450

Analyte B2EHP
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB108C
W. Statistic =0.86040

Analyte SR90
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB108C
W. Statistic =0.89960

Analyte TC99
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB108C
W. Statistic =0.94970

Analyte ZNTOT
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X
H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB108D
W. Statistic =0.89030

Analyte TRITIUM
W. Quantile =0.79200

Combined Shewhart-CUSUM Chart

Well HSB109C
W. Statistic =0.90710

Analyte BATOT
W. Quantile =0.84400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB109C
W. Statistic =0.88450

Analyte CH₂CL₂
W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well HSB109D
W. Statistic =0.94640

Analyte ALPHAG
W. Quantile =0.84400

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB109D
W. Statistic =0.96580

Analyte BATOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB109D
W. Statistic =0.96650

Analyte BETAG
W. Quantile =0.85800

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB109D
W. Statistic =0.87080

Analyte HGTOT
W. Quantile =0.80500

Combined Shewhart-CUSUM Chart

Well HSB109D
W. Statistic =0.97750

Analyte NITOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB110C
W. Statistic = 0.92590

Analyte BATOT
W. Quantile =0.74900

Background Data Summary: Mean=0.478E+01 STD.DEV =0.386E+00No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well HSB110C
W. Statistic = 0.84100

Analyte BETAG
W. Quantile =0.76400

Background Data Summary: Mean=0.189E-02 STD.DEV =0.780E-03 No.Samps. = 9

STD. Mean	O
+CUSUM	+
-CUSUM	X
-Area HWMF	

Combined Shewhart-CUSUM Chart

Well HSB110C
W. Statistic =0.83510

Analyte CH2CL2
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB110C
W. Statistic =0.94730

Analyte ZNTOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB110D

W. Statistic = 0.86450

Analyte ALPHAG

W. Quantile = 0.80500

Combined Shewhart-CUSUM Chart

Well HSB110D

W. Statistic = 0.93920

Analyte BATOT

W. Quantile = 0.76400

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB110D
W. Statistic =0.87110

Analyte RA226
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB110D
W. Statistic =0.90680

Analyte SR90
W. Quantile =0.74900

STD. Mean o
+CUSUM +
-CUSUM x

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB110D
W. Statistic =0.81850

Analyte TC99
W. Quantile =0.74900

Background Data Summary: Mean=0.103E+00 STD.DEV =0.107E+00No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well HSB110D
W. Statistic =0.86010

Analyte ZNTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.229E+01 STD.DEV =0.663E+00No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM *

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB111D
W. Statistic =0.94630

Analyte TRITIUM
W. Quantile =0.86800

Combined Shewhart-CUSUM Chart

Well HSB111D
W. Statistic =0.84950

Analyte ZNTOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB111E
W. Statistic =0.93340

Analyte BATOT
W. Quantile =0.76400

Background Data Summary: Mean=0.613E+01 STD.DEV =0.723E+00 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB111E
W. Statistic =0.83000

Analyte RA226
W. Quantile =0.74900

Background Data Summary: Mean=0.188E-02 STD.DEV =0.146E-02 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB111E
W. Statistic =0.85830

Analyte TC99
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB111E
W. Statistic =0.92640

Analyte TRITIUM
W. Quantile =0.86300

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

F - 61

Third and Fourth Quarter, 1997

Combined Shewhart-CUSUM Chart

Well HSB112C
W. Statistic =0.88780

Analyte BATOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB112C
W. Statistic =0.90650

Analyte BETAG
W. Quantile =0.85800

STD. Mean O
+CUSUM +
-CUSUM X

Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB112C
W. Statistic =0.96480

Analyte TRITIUM
W. Quantile =0.85800

Combined Shewhart-CUSUM Chart

Well HSB112C
W. Statistic =0.87530

Analyte ZNTOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB112D
W. Statistic =0.83630

Analyte RA226
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB112D
W. Statistic =0.94980

Analyte TRITIUM
W. Quantile =0.86800

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB112E
W. Statistic =0.92390

Analyte BATOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB112E
W. Statistic =0.93260

Analyte NITOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB112E
W. Statistic =0.94170

Analyte SR90
W. Quantile =0.74900

Background Data Summary: Mean=0.985E-01 STD.DEV =0.326E-01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well HSB112E
W. Statistic =0.89760

Analyte TC99
W. Quantile =0.76400

Background Data Summary: Mean=-.177E+01 STD.DEV =0.267E+01 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB112E
W. Statistic =0.93730

Analyte ZNTOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB113C
W. Statistic =0.89640

Analyte BATOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB113D
W. Statistic =0.96250

Analyte BATOT
W. Quantile =0.76400

Background Data Summary: Mean=0.868E+02 STD.DEV =0.212E+02 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB113D
W. Statistic =0.90540

Analyte BETAG
W. Quantile =0.86800

Background Data Summary: Mean=0.211E+01 STD.DEV =0.765E+00 No.Samps. = 20

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB113D
W. Statistic =0.98250

Analyte I129
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB113D
W. Statistic =0.94510

Analyte RA226
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB113D
W. Statistic =0.89390

Analyte SR90
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB113D
W. Statistic =0.93760

Analyte TRITIUM
W. Quantile =0.86300

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB113D
W. Statistic =0.97290

Analyte ZNTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.829E+02 STD.DEV =0.191E+02No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB114C
W. Statistic =0.97390

Analyte BATOT
W. Quantile =0.76400

Background Data Summary: Mean=0.690E+02 STD.DEV =0.193E+02No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB114C
W. Statistic =0.96470

Analyte BETAG
W. Quantile =0.86800

Combined Shewhart-CUSUM Chart

Well HSB114C
W. Statistic =0.91050

Analyte HGTOT
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB114C

W. Statistic =0.96550

Analyte I129

W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB114C

W. Statistic =0.94530

Analyte NITOT

W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

I-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB114C
W. Statistic =0.92100

Analyte RA226
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB114C
W. Statistic =0.93070

Analyte TRITIUM
W. Quantile =0.87300

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB114C
W. Statistic = 0.85300

Analyte ZNTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.414E+02 STD.DEV =0.101E+02No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic = 0.96390

Analyte ALPHAG
W. Quantile =0.84400

Background Data Summary: Mean=-.317E+01 STD.DEV =0.709E+00No.Samps. = 16

STD. Mean	O
+CUSUM	+
-CUSUM	X
-Area HWMF	

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic =0.87240

Analyte BATOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic =0.96740

Analyte BETAG
W. Quantile =0.86300

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic =0.88720

Analyte CO60
W. Quantile =0.81400

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic =0.87120

Analyte CUTOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic =0.97210

Analyte I129
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic =0.91670

Analyte NITOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic = 0.91900

Analyte SR90
W. Quantile = 0.78100

Background Data Summary: Mean=0.698E+00 STD.DEV =0.181E+00No.Samps. = 10

Combined Shewhart-CUSUM Chart

Well HSB114D
W. Statistic = 0.96520

Analyte TRITIUM
W. Quantile = 0.86800

Background Data Summary: Mean=0.468E+04 STD.DEV =0.201E+04No.Samps. = 20

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115C
W. Statistic =0.94460

Analyte BATOT
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well HSB115C
W. Statistic =0.95720

Analyte BETAG
W. Quantile =0.87300

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115C
W. Statistic =0.82870

Analyte I129
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB115C
W. Statistic =0.83880

Analyte RA226
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115C
W. Statistic = 0.84610

Analyte SR90
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well HSB115C
W. Statistic = 0.91430

Analyte TRITIUM
W. Quantile = 0.87800

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115C
W. Statistic =0.86670

Analyte ZNTOT
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic =0.92870

Analyte ALPHAG
W. Quantile =0.85100

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic =0.95630

Analyte BATOT
W. Quantile =0.76400

Background Data Summary: Mean=0.185E+03 STD.DEV =0.236E+02 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic =0.86470

Analyte CDTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.399E+01 STD.DEV =0.751E+00 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic =0.90480

Analyte I129
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic =0.89240

Analyte NITOT
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic = 0.88450

Analyte PBTOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic = 0.92150

Analyte SR90
W. Quantile = 0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB115D
W. Statistic =0.94170

Analyte ZNTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.129E+03 STD.DEV =0.298E+02No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB116C
W. Statistic =0.90980

Analyte ALPHAG
W. Quantile =0.86300

Background Data Summary: Mean=-.486E+01 STD.DEV =0.638E+00No.Samps. = 19

STD. Mean O
+CUSUM +
-CUSUM X

Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB116C
W. Statistic =0.95580

Analyte BATOT
W. Quantile =0.78100

Combined Shewhart-CUSUM Chart

Well HSB116C
W. Statistic =0.92950

Analyte BETAG
W. Quantile =0.86300

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

F - 95

Third and Fourth Quarter, 1997

Combined Shewhart-CUSUM Chart

Well HSB116C
W. Statistic = 0.91720

Analyte HGTOT
W. Quantile = 0.81400

Background Data Summary: Mean=0.105E+01 STD.DEV = 0.205E+00 No.Samps. = 13

Combined Shewhart-CUSUM Chart

Well HSB116C
W. Statistic = 0.95480

Analyte I129
W. Quantile = 0.74900

Background Data Summary: Mean=0.136E-01 STD.DEV = 0.707E-02 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O

+CUSUM +

-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB116C
W. Statistic = 0.95970

Analyte TRITIUM
W. Quantile =0.86800

Background Data Summary: Mean=0.113E+05 STD.DEV =0.542E+04No.Samps. = 20

Combined Shewhart-CUSUM Chart

Well HSB116C
W. Statistic = 0.88740

Analyte ZNTOT
W. Quantile =0.78100

Background Data Summary: Mean=0.146E+02 STD.DEV =0.651E+01No.Samps. = 10

STD. Mean	O
+CUSUM	+
-CUSUM	X
-Area HWMF	

Combined Shewhart-CUSUM Chart

Well HSB116D
W. Statistic =0.84330

Analyte ALPHAG
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB116D
W. Statistic =0.90340

Analyte BETAG
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB116D
W. Statistic = 0.92200

Analyte TRITIUM
W. Quantile =0.79200

Combined Shewhart-CUSUM Chart

Well HSB117C
W. Statistic = 0.97460

Analyte ALPHAG
W. Quantile =0.86300

STD. Mean	O
+CUSUM	+
-CUSUM	X

Combined Shewhart-CUSUM Chart

Well HSB117C
W. Statistic =0.95650

Analyte BATOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB117C
W. Statistic =0.83620

Analyte CH2CL2
W. Quantile =0.76400

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB117C
W. Statistic =0.89010

Analyte HGTOT
W. Quantile =0.76400

Background Data Summary: Mean=0.241E+00 STD.DEV =0.512E-01 No.Samps. = 9

Combined Shewhart-CUSUM Chart

Well HSB117C
W. Statistic =0.85020

Analyte RA228
W. Quantile =0.74900

Background Data Summary: Mean=0.338E-02 STD.DEV =0.267E-02 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB119A
W. Statistic = 0.95100

Analyte BATOT
W. Quantile = 0.76400

Combined Shewhart-CUSUM Chart

Well HSB119A
W. Statistic = 0.91830

Analyte BETAG
W. Quantile = 0.86800

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB121A
W. Statistic = 0.89300

Analyte BATOT
W. Quantile = 0.80500

Background Data Summary: Mean=0.395E+02 STD.DEV =0.550E+01 No.Samps. = 12

Combined Shewhart-CUSUM Chart

Well HSB121A
W. Statistic = 0.88120

Analyte ZNTOT
W. Quantile = 0.78100

Background Data Summary: Mean=0.935E+00 STD.DEV =0.817E+00 No.Samps. = 10

STD. Mean ○
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB123A
W. Statistic =0.94310

Analyte BETAG
W. Quantile =0.86300

Background Data Summary: Mean=0.295E-02 STD.DEV =0.190E-02 No.Samps. = 19

Combined Shewhart-CUSUM Chart

Well HSB124AR
W. Statistic =0.95280

Analyte BATOT
W. Quantile =0.76400

Background Data Summary: Mean=0.353E+02 STD.DEV =0.287E+01 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB125D
W. Statistic = 0.82590

Analyte CH₂CL₂
W. Quantile = 0.74900

Combined Shewhart-CUSUM Chart

Well HSB125D
W. Statistic = 0.91660

Analyte HGTOT
W. Quantile = 0.80500

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB126C
W. Statistic = 0.94390

Analyte TCLEE
W. Quantile = 0.79200

Background Data Summary: Mean=0.179E+01 STD.DEV =0.354E+00 No.Samps. = 11

Combined Shewhart-CUSUM Chart

Well HSB126D
W. Statistic = 0.89240

Analyte BATOT
W. Quantile = 0.76400

Background Data Summary: Mean=0.855E+02 STD.DEV =0.142E+02 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM x

Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB126D
W. Statistic =0.92690

Analyte HGTOT
W. Quantile =0.80500

Background Data Summary: Mean=0.457E+01 STD.DEV =0.229E+01 No.Samps. = 12

Combined Shewhart-CUSUM Chart

Well HSB126D
W. Statistic =0.93930

Analyte I129
W. Quantile =0.74900

Background Data Summary: Mean=0.130E-01 STD.DEV =0.524E-02 No.Samps. = 8

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB126D
W. Statistic = 0.88680

Analyte ZNTOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB127D
W. Statistic =0.95790

Analyte ALPHAG
W. Quantile =0.87300

STD. Mean	O
+CUSUM	+
-CUSUM	X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O

+CUSUM +

-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB127D
W. Statistic =0.84880

Analyte CH2CL2
W. Quantile =0.78100

Background Data Summary: Mean=0.127E+01 STD.DEV =0.794E+00No.Samps. = 10

Combined Shewhart-CUSUM Chart

Well HSB127D
W. Statistic =0.93480

Analyte HGTOT
W. Quantile =0.80500

Background Data Summary: Mean=0.433E+01 STD.DEV =0.761E+00No.Samps. = 12

STD. Mean O
+CUSUM +
-CUSUM X

Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB136C
W. Statistic =0.96600

Analyte BETAG
W. Quantile =0.86800

Combined Shewhart-CUSUM Chart

Well HSB136C
W. Statistic =0.89120

Analyte I129
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB136C
W. Statistic = 0.93170

Analyte ZNTOT
W. Quantile = 0.74900

Background Data Summary: Mean=0.104E+02 STD.DEV =0.572E+01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well HSB136D
W. Statistic = 0.96840

Analyte BATOT
W. Quantile = 0.76400

Background Data Summary: Mean=0.774E+02 STD.DEV =0.141E+02 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X
-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB136D
W. Statistic =0.94830

Analyte BETAG
W. Quantile =0.86800

Combined Shewhart-CUSUM Chart

Well HSB136D
W. Statistic =0.93090

Analyte CO60
W. Quantile =0.80500

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB136D
W. Statistic =0.92310

Analyte NITOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB136D
W. Statistic =0.86670

Analyte RA226
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X
I-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB136D
W. Statistic =0.86940

Analyte SR90
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB136D
W. Statistic =0.92100

Analyte TRITIUM
W. Quantile =0.86300

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB137C
W. Statistic = 0.87870

Analyte ALPHAG
W. Quantile = 0.81400

Background Data Summary: Mean = -.525E+01 STD.DEV = 0.759E+00 No. Samps. = 13

Combined Shewhart-CUSUM Chart

Well HSB137C
W. Statistic = 0.96450

Analyte BATOT
W. Quantile = 0.76400

Background Data Summary: Mean = 0.574E+02 STD.DEV = 0.583E+01 No. Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB137C
W. Statistic = 0.95990

Analyte BETAG
W. Quantile = 0.86800

Combined Shewhart-CUSUM Chart

Well HSB137C
W. Statistic = 0.96310

Analyte I129
W. Quantile = 0.74900

STD. Mean ○
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB137C
W. Statistic =0.92940

Analyte ZNTOT
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB137D
W. Statistic =0.90240

Analyte PBTOT
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB137D
W. Statistic =0.90520

Analyte SR90
W. Quantile =0.74900

Background Data Summary: Mean=0.539E-01 STD.DEV =0.341E-01 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well HSB137D
W. Statistic =0.90690

Analyte TRITIUM
W. Quantile =0.86800

Background Data Summary: Mean=0.331E+04 STD.DEV =0.160E+04 No.Samps. = 20

STD. Mean O
+CUSUM +
-CUSUM X
Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB139C
W. Statistic =0.90520

Analyte TCLEE
W. Quantile =0.83500

Combined Shewhart-CUSUM Chart

Well HSB139D
W. Statistic =0.85680

Analyte CO60
W. Quantile =0.79200

STD. Mean O
+CUSUM +
-CUSUM X
I-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Combined Shewhart-CUSUM Chart

STD. Mean O
+CUSUM +
-CUSUM X
I-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB145D
W. Statistic =0.90770

Analyte BATOT
W. Quantile =0.76400

Combined Shewhart-CUSUM Chart

Well HSB145D
W. Statistic =0.86720

Analyte CO60
W. Quantile =0.78100

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB145D
W. Statistic =0.92860

Analyte I129
W. Quantile =0.74900

Background Data Summary: Mean=0.115E-01 STD.DEV =0.273E-02 No.Samps. = 8

Combined Shewhart-CUSUM Chart

Well HSB145D
W. Statistic =0.83920

Analyte NITOT
W. Quantile =0.76400

Background Data Summary: Mean=0.215E+01 STD.DEV =0.236E+00 No.Samps. = 9

STD. Mean O
+CUSUM +
-CUSUM x

Area HWMF

Combined Shewhart-CUSUM Chart

Well HSB145D
W. Statistic =0.82510

Analyte RA226
W. Quantile =0.74900

Combined Shewhart-CUSUM Chart

Well HSB145D
W. Statistic =0.88570

Analyte SR90
W. Quantile =0.74900

STD. Mean O
+CUSUM +
-CUSUM X

H-Area HWMF

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Appendix G

UIC Sample Results

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H-Area WTU UIC Sample Results: 7/97-12/97

UIC Permitted Constituents	Unit	Reg Limit	July Result	August Result	September Result	October Result	November Result	December Result
Section I, INORGANICS								
Arsenic	ug/L	50	<20	<5	<5	<5	<5	<5
Barium	ug/L	2000	<5	<5	11.80	19.30	9.20	8.35
Cadmium	ug/L	5	<5	<5	<5	<5	<5	<5
Chromium	ug/L	100	<10	8.17	<5	<5	<5	<5
Lead	ug/L	50	<3	<5	<5	<5	<5	<5
Mercury	ug/L	2	<1	<0.2	<0.2	<0.2	<0.2	<0.2
Selenium	ug/L	50	<5	<5	<5	<5	<5	<5
Silver	ug/L	50	<5	<5	<5	<5	<5	<5
Section II, ORGANICS								
Antimony	ug/L	6	<5	<10	<10	<10	<10	<10
Cobalt	ug/L	140	<10	<5	<5	5.11	<5	<5
Copper	ug/L	1300	<5	<5	<5	<5	<5	<5
Cyanide	ug/L	200000	<20	144.00	<10	<10	<10	<10
Benzene	ug/L	5	<5	<2	<1	<1	<1	<1
Bis(2-ethylhexyl) phthalate	ug/L	140	<10	69.10	<10	<11.1	<10.9	<10.5
Methylene Chloride	ug/L	5	<5	<5	<1	<1	<1	<1
Nickel	ug/L	100	<10	48.50	5.46	5.14	8.08	<5
Tetrachloroethylene	ug/L	5		<2	<1	<1	<1	<1
Tin	ug/L	50	<25	<10	<10	<10	<10	<10
Trichloroethylene	ug/L	5		<2	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	100	<10	<2	<1	<1	<1	<1
Vanadium	ug/L	49	<20	<5	<5	<5	<5	<5
Zinc	ug/L	5000	<5	26.90	<5	15.60	14.90	<5
Section III, RADIONUCLIDES								
Gross Alpha	pCi/L	15	0.10	2.13	5.63	30.20	2.86	5.65
Gross Beta	pCi/L	50	33.70	64.90	179.00	542.00	224.00	380.00
Total Radium (226+228)	pCi/L	5	BDL	BDL	>5	14.76	10.44	17.13
Section IV, RADIONUCLIDES								
Americium-241	pCi/L	SOA	<2.33	<0.31	<0.371	<0.173	<0.193	<0.498
Cesium-137	pCi/L	SOB	<1.95	<2.22	<3.73	<3.73	invalid	<3.09
Curium-242	pCi/L	SOA	<3.71	<0.2	<0.252	<0.118	<0.167	<0.304
Curium-243/244	pCi/L	SOA	BDL	<0.23	<0.42	<0.153	<0.181	<0.422
Curium-246	pCi/L	SOA	<6.06	0.10	<0.101	<0.0753	<0.0961	<0.239
Carbon-14	pCi/L	SOB	9.61	<8.53	<23.6	122.00	<106	150.00
Cobalt-60	pCi/L	SOB	<2.1	<2.57	5.18	10.50	8.81	<3.57
Iodine-129	pCi/L	SOB	<2.38	7.58	<50	23.70	15.70	25.80
Plutonium-238	pCi/L	SOA	<5.44	<0.28	<0.645	<0.177	<0.365	<0.313
Plutonium-239/240	pCi/L	SOA	BDL	<0.16	<0.375	<0.0876	<0.435	<0.165
Nickel-63	pCi/L	SOB	<4.17	<2.57	5.18	10.50	8.81	<3.57
Radium-226	pCi/L	SOR	<1.68	<0.53	<1.05	1.36	1.08	1.53
Radium-228	pCi/L	SOR	<1.55	<5	>5	13.40	9.33	15.60
Strontium-90	pCi/L	SOB	7.72	31.00	93.30	>50	171.00	>50
Technetium-99	pCi/L	SOB	<6.36	11.40	31.40	47.40	36.40	34.90
Thorium-228	pCi/L	SOA	<6.76	<0.28	0.37	<0.771	<0.372	<0.233
Thorium-230	pCi/L	SOA	<14.3	invalid	<0.391	<0.288	0.22	<0.101
Thorium-232	pCi/L	SOA	<4.67	<0.08	<0.276	<0.164	<0.0726	<0.101
Uranium-233/234	pCi/L	SOA	<4.77	0.15	0.87	0.99	<0.107	0.46
Uranium-235	pCi/L	SOA		<0.03	<0.0886	<0.0271	<0.0703	<0.176
Uranium-238	pCi/L	SOA	<3.6	<0.08	<0.102	0.34	<0.0334	<0.188
Sum of Alphas			BDL	0.24	1.24	2.69	1.30	1.99
Sum of Betas			17.33	49.98	135.06	227.50	197.95	226.30

H-Area WTU UIC Sample Results: July 1997

UIC Permitted Constituents	Reg	July	Exceedence	
Constituent	Unit	Limit	Result	Y/N
Notes				
Section I, INORGANICS				
Arsenic	µg/L	50	<20	N
Barium	µg/L	2000	<5	N
Cadmium	µg/L	5	<5	N
Chromium	µg/L	100	<10	N
Lead	µg/L	50	<3	N
Mercury	µg/L	2	<1	N
Selenium	µg/L	50	<5	N
Silver	µg/L	50	<5	N
Section II, ORGANICS				
Antimony	µg/L	6	<5	N
Cobalt	µg/L	140	<10	N
Copper	µg/L	1300	<5	N
Cyanide	µg/L	200000	<20	N
Benzene	µg/L	5	<5	N
BEHP	µg/L	140	<10	N
Methylene Chloride	5 µg/L	5	<5	N
Nickel	µg/L	100	<10	N
Tetrachloroethylene	µg/L	5		
Tin	µg/L	50	<25	N
Trichloroethylene	µg/L	5		
Trichlorofluoromethane	µg/L	100	<10	N
Vanadium	µg/L	49	<20	N
Zinc	µg/L	5000	<5	N
Section III, RADIONUCLIDES				
Gross Alpha	pCi/L	15	0.10	N
Gross Beta	pCi/L	50	33.70	N
Total Radium (226+228)	pCi/L	5	BDL	N
Section IV, RADIONUCLIDES				
Americium-241	pCi/L	SOA	<2.33	N
Cesium-137	pCi/L	SOB	<1.95	N
Curium-242	pCi/L	SOA	<3.71	N
Curium-243/244	pCi/L	SOA	BDL	N
Curium-246	pCi/L	SOA	<6.06	N
Carbon-14	pCi/L	SOB	9.61	N
Cobalt-60	pCi/L	SOB	<2.1	N
Iodine-129	pCi/L	SOB	<2.38	N
Plutonium-238	pCi/L	SOA	<5.44	N
Plutonium-239/240	pCi/L	SOA	BDL	N
Nickel-63	pCi/L	SOB	<4.17	N
Radium-226	pCi/L	SOR	<1.68	N
Radium-228	pCi/L	SOR	<1.55	N
Strontium-90	pCi/L	SOB	7.72	N
Technetium-99	pCi/L	SOB	<6.36	N
Thorium-228	pCi/L	SOA	<6.76	N
Thorium-230	pCi/L	SOA	<14.3	N
Thorium-232	pCi/L	SOA	<4.67	N
Uranium-233/234	pCi/L	SOA	<4.77	N
Uranium-235	pCi/L	SOA		N
Uranium-238	pCi/L	SOA	<3.6	N
Sum of Alphas			BDL	N
Sum of Betas			17.33	N

H-Area WTU UIC Sample Results: August 1997

UIC Permitted Constituents		Reg	Raw	Rad			August	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									
Arsenic	µg/L	50	5		U	5	<5	N	Samples collected 8/27/97
Barium	µg/L	2000	2.69		J	5	<5	N	
Cadmium	µg/L	5	0.275		J	5	<5	N	
Chromium	µg/L	100	8.17			5	8.17	N	
Lead	µg/L	50	0.986		J	5	<5	N	
Mercury	µg/L	2	0.2		U	0.2	<0.2	N	
Selenium	µg/L	50	3.2		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	10		U	10	<10	N	DL too high
Cobalt	µg/L	140	1.41		J	5	<5	N	
Copper	µg/L	1300	4.32		J	5	<5	N	
Cyanide	µg/L	200000	144			10	144.00	N	
Benzene	µg/L	5	2		U	2	<2	N	
BEHP	µg/L	140	69.1			11.1	69.10	N	
Methylene Chloride	µg/L	5	5		U	5	<5	N	
Nickel	µg/L	100	48.5			5	48.50	N	
Tetrachloroethylene	µg/L	5	2		U	2	<2	N	
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	2		U	2	<2	N	
Trichlorofluoromethane	µg/L	100	2		U	2	<2	N	
Vanadium	µg/L	49	5		U	5	<5	N	
Zinc	µg/L	5000	26.9			5	26.90	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	2.13	0.82		0.742	2.13	N	
Gross Beta	pCi/L	50	64.3	2.4		1.15	64.30	Y	
Total Radium (226+228)	pCi/L	5					BDL	N	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	0.0871	0.157	UI	0.311	<0.31	N	
Cesium-137	pCi/L	SOB	0.0005	1.25	UI	2.22	<2.22	N	
Curium-242	pCi/L	SOA	0.0412	0.0933	UI	0.2	<0.2	N	
Curium-243/244	pCi/L	SOA	0.108	0.13	UI	0.231	<0.23	N	
Curium-246	pCi/L	SOA	0.0983	0.0887		0.059	0.10	N	
Carbon-14	pCi/L	SOB	-2.56	4.84	UI	8.53	<8.53	N	
Cobalt-60	pCi/L	SOB	0.876	1.35	UI	2.57	<2.57	N	
Iodine-129	pCi/L	SOB	7.58	2.35		2.2	7.58	N	
Plutonium-238	pCi/L	SOA	0.233	0.178	UI	0.278	<0.28	N	
Plutonium-239/240	pCi/L	SOA	0.0609	0.089	UI	0.155	<0.16	N	
Nickel-63	pCi/L	SOB					<2.57	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	0.297	0.337	UI	0.534	<0.53	N	
Radium-228	pCi/L	SOR	4.94	0.729	J	1.02	<5	N	Estimated value; probably under limit
Strontium-90	pCi/L	SOB	31	1.89		1.3	31.00	N	
Technetium-99	pCi/L	SOB	11.4	4.23		8.44	11.40	N	
Thorium-228	pCi/L	SOA	-0.0103	0.15	UI	0.28	<0.28	N	
Thorium-230	pCi/L	SOA	0.163	0.0979	R	0.113	invalid	N	Rejected analytical result.
Thorium-232	pCi/L	SOA	0	0	UI	0.078	<0.08	N	
Uranium-233/234	pCi/L	SOA	0.146	0.0835		0.0766	0.15	N	
Uranium-235	pCi/L	SOA	0.0312	0.0361	UI	0.0312	<0.03	N	
Uranium-238	pCi/L	SOA	0.084	0.0653	UV	0.0766	<0.08	N	
Sum of Alphas							0.24	N	
Sum of Betas							49.98	N	

H-Area WTU UIC Sample Results: September 1997

UIC Permitted Constituents		Reg	Raw	Rad			September	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 9/25/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	11.8			5	11.80	N	
Cadmium	µg/L	5	0.381		J	5	<5	N	
Chromium	µg/L	100	2.49		J	5	<5	N	
Lead	µg/L	50	5		U	5	<5	N	
Mercury	µg/L	2	1.04			0.2	<0.2	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	2.24		J	10	<10	N	DL too high
Cobalt	µg/L	140	2.22		J	5	<5	N	
Copper	µg/L	1300	1.95		J	5	<5	N	
Cyanide	µg/L	200000	10		UJ	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	10		U	10	<10	N	
Methylene Chloride	µg/L	5	1		U	1	<1	N	
Nickel	µg/L	100	5.46			5	5.46	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	1		U	1	<1	N	
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N	
Vanadium	µg/L	49	0.583		J	5	<5	N	
Zinc	µg/L	5000	8.87		U	5	<5	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	5.63	2.43		1.32	5.63	N	
Gross Beta	pCi/L	50	179	5.6		1.58	179.00	Y	
Total Radium (226+228)	pCi/L	5					>5	Y	Estimated value; probably elevated
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	0.0795	0.212	UI	0.371	<0.371	N	
Cesium-137	pCi/L	SOB	0.705	1.96	UI	3.73	<3.73	N	
Curium-242	pCi/L	SOA	-0.0142	0.124	UI	0.252	<0.252	N	
Curium-243/244	pCi/L	SOA	-0.0398	0.227	UI	0.42	<0.42	N	
Curium-246	pCi/L	SOA	0.0397	0.0593	UI	0.101	<0.101	N	
Carbon-14	pCi/L	SOB	5.33	13.8	UI	23.6	<23.6	N	
Cobalt-60	pCi/L	SOB	5.18	3.32		3.5	5.18	N	
Iodine-129	pCi/L	SOB	18.5	4.57	J	2.64	<50	N	Estimated value; probably under limit
Plutonium-238	pCi/L	SOA	0.382	0.361	UIJ	0.645	<0.645	N	
Plutonium-239/240	pCi/L	SOA	-0.0677	0.0561	UI	0.375	<0.375	N	
Nickel-63	pCi/L	SOB					5.18	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	0.776	0.711	UI	1.05	<1.05	N	
Radium-228	pCi/L	SOR	17.2	0.906	J	0.693	>5	Y	Estimated value; probably elevated
Strontium-90	pCi/L	SOB	93.3	3.52		1.81	93.30	Y	
Technetium-99	pCi/L	SOB	31.4	10.8		20.7	31.40	N	
Thorium-228	pCi/L	SOA	0.371	0.257		0.36	0.37	N	
Thorium-230	pCi/L	SOA	0.192	0.238	UI	0.391	<0.391	N	
Thorium-232	pCi/L	SOA	-0.0384	0.121	UI	0.276	<0.276	N	
Uranium-233/234	pCi/L	SOA	0.867	0.201		0.102	0.87	N	
Uranium-235	pCi/L	SOA	0.0833	0.0672	UI	0.0886	<0.0886	N	
Uranium-238	pCi/L	SOA	0.212	0.101	UI	0.102	<0.102	N	
Sum of Alphas							1.24	N	
Sum of Betas							135.06	Y	

H-Area WTU UIC Sample Results: October 1997

UIC Permitted Constituents		Reg	Raw	Rad			October	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 10/30/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	19.3			5	19.30	N	
Cadmium	µg/L	5	0.598		J	5	<5	N	
Chromium	µg/L	100	0.766		J	5	<5	N	
Lead	µg/L	50	0.906		J	5	<5	N	
Mercury	µg/L	2	0.47		U	0.2	<0.2	N	
Selenium	µg/L	50	1.71		U	5	<5	N	
Silver	µg/L	50	2		J	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	10		U	10	<10	N	DL too high
Cobalt	µg/L	140	5.11			5	5.11	N	
Copper	µg/L	1300	5		U	5	<5	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	11.1		UJ	11.1	<11.1	N	
Methylene Chloride	µg/L	5	1		U	1	<1	N	
Nickel	µg/L	100	5.14			5	5.14	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	1		U	1	<1	N	
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N	
Vanadium	µg/L	49	5		U	5	<5	N	
Zinc	µg/L	5000	15.6			5	15.60	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	30.2	5.39		1.77	30.20	Y	
Gross Beta	pCi/L	50	542	13.6		3.12	542.00	Y	
Total Radium (226+228)	pCi/L	5					14.76	Y	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	-0.0158	0.0729	UI	0.173	<0.173	N	
Cesium-137	pCi/L	SOB	3.54	3.35	UI	3.73	<3.73	N	
Curium-242	pCi/L	SOA	0.0021	0.0471	UI	0.118	<0.118	N	
Curium-243/244	pCi/L	SOA	0.0577	0.0803	UI	0.153	<0.153	N	
Curium-246	pCi/L	SOA	0.0316	0.0422	UI	0.0753	<0.0753	N	
Carbon-14	pCi/L	SOB	122	66.1		107	122.00	Y	
Cobalt-60	pCi/L	SOB	10.5	4.53		4.07	10.50	N	
Iodine-129	pCi/L	SOB	23.7	3.64		1.87	23.70	N	
Plutonium-238	pCi/L	SOA	0.244	0.13	UIJ	0.177	<0.177	N	
Plutonium-239/240	pCi/L	SOA	0.0062	0.0336	UI	0.0876	<0.0876	N	
Nickel-63	pCi/L	SOB					10.50	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	1.36	0.412		0.356	1.36	N	
Radium-228	pCi/L	SOR	13.4	1.13		1.04	13.40	Y	
Strontium-90	pCi/L	SOB	234	5.16	J	1.42	>50	Y	Estimated result; probably elevated
Technetium-99	pCi/L	SOB	47.4	8.25		14.3	47.40	N	
Thorium-228	pCi/L	SOA	0.0406	0.304	UI	0.771	<0.771	N	
Thorium-230	pCi/L	SOA	0.0415	0.113	UI	0.288	<0.288	N	
Thorium-232	pCi/L	SOA	0	0	UI	0.164	<0.164	N	
Uranium-233/234	pCi/L	SOA	0.987	0.215		0.0763	0.99	N	
Uranium-235	pCi/L	SOA	0.0271	0.0314	UI	0.0271	<0.0271	N	
Uranium-238	pCi/L	SOA	0.338	0.117		0.0555	0.34	N	
Sum of Alphas							2.69	N	
Sum of Betas							227.50	Y	

H-Area WTU UIC Sample Results: November 1997

UIC Permitted Constituents		Reg	Raw	Rad			November	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 11/24/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	9.2			5	9.20	N	
Cadmium	µg/L	5	0.519		U	5	<5	N	
Chromium	µg/L	100	2.82		J	5	<5	N	
Lead	µg/L	50	5		UJ	5	<5	N	
Mercury	µg/L	2	0.2		U	0.2	<0.2	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									DL too high
Antimony	µg/L	6	10		U	10	<10	N	
Cobalt	µg/L	140	2.57		J	5	<5	N	
Copper	µg/L	1300	5		U	5	<5	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	10.9		U	10.9	<10.9	N	
Methylene Chloride	µg/L	5	1		U	1	<1	N	
Nickel	µg/L	100	8.08			5	8.08	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	1		U	1	<1	N	
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N	
Vanadium	µg/L	49	5		U	5	<5	N	
Zinc	µg/L	5000	14.9			5	14.90	N	
Section III, RADIONCULIDES									
Gross Alpha	pCi/L	15	2.86	1.15		0.782	2.86	N	
Gross Beta	pCi/L	50	224	4.42		1.12	224.00	Y	
Total Radium (226+228)	pCi/L	5					10.41	Y	
Section IV, RADIONCULIDES									Calibrated to Co-60
Americium-241	pCi/L	SOA	-0.0385	0.0691	UIJ	0.193	<0.193	N	
Cesium-137	pCi/L	SOB	6.84	3.49	R	2.97	invalid	N	
Curium-242	pCi/L	SOA	-0.0412	0.0475	UIJ	0.167	<0.167	N	
Curium-243/244	pCi/L	SOA	0.0118	0.0796	UI	0.181	<0.181	N	
Curium-246	pCi/L	SOA	-0.0001	0.0308	UIJ	0.0961	<0.0961	N	
Carbon-14	pCi/L	SOB	2.14	61	UI	106	<106	N	
Cobalt-60	pCi/L	SOB	8.81	2.89		4.22	8.81	N	
Iodine-129	pCi/L	SOB	15.7	2.27		0.99	15.70	N	
Plutonium-238	pCi/L	SOA	0.116	0.188	UI	0.365	<0.365	N	
Plutonium-239/240	pCi/L	SOA	-0.12	0.15	UIJ	0.435	<0.435	N	
Nickel-63	pCi/L	SOB					8.81	N	
Radium-226	pCi/L	SOR	1.08	0.531		0.183	1.08	N	
Radium-228	pCi/L	SOR	9.33	0.693		0.692	9.33	Y	
Strontium-90	pCi/L	SOB	171	8.08		3.5	171.00	Y	
Technetium-99	pCi/L	SOB	36.4	14.5		27.3	36.40	N	
Thorium-228	pCi/L	SOA	-0.0889	0.126	UI	0.372	<0.372	N	
Thorium-230	pCi/L	SOA	0.218	0.161		0.186	0.22	N	
Thorium-232	pCi/L	SOA	0.0484	0.069	UI	0.0726	<0.0726	N	
Uranium-233/234	pCi/L	SOA	0.656	0.187	UIJ	0.107	<0.107	N	
Uranium-235	pCi/L	SOA	-0.0056	0.0113	UIJ	0.0703	<0.0703	N	
Uranium-238	pCi/L	SOA	0.111	0.0712	UIJ	0.0334	<0.0334	N	
Sum of Alphas							1.30	N	
Sum of Betas							197.95	Y	

H-Area WTU UIC Sample Results: December 1997

UIC Permitted Constituents		Reg	Raw	Rad			December	Exceedence	
Constituent	Unit	Limit	Result	Acc	Qual.	QL	Result	Y/N	Notes
Section I, INORGANICS									Samples collected 12/16/97
Arsenic	µg/L	50	5		U	5	<5	N	
Barium	µg/L	2000	8.35			5	8.35	N	
Cadmium	µg/L	5	5		U	5	<5	N	
Chromium	µg/L	100	0.839		J	5	<5	N	
Lead	µg/L	50	5		U	5	<5	N	
Mercury	µg/L	2	0.111		J	0.2	<0.2	N	
Selenium	µg/L	50	5		U	5	<5	N	
Silver	µg/L	50	5		U	5	<5	N	
Section II, ORGANICS									
Antimony	µg/L	6	10		U	10	<10	N	DL too high
Cobalt	µg/L	140	5		U	5	<5	N	
Copper	µg/L	1300	5		U	5	<5	N	
Cyanide	µg/L	200000	10		U	10	<10	N	
Benzene	µg/L	5	1		U	1	<1	N	
BEHP	µg/L	140	10.5		U	10.5	<10.5	N	
Methylene Chloride	µg/L	5	1		U	1	<1	N	
Nickel	µg/L	100	3.91		J	5	<5	N	
Tetrachloroethylene	µg/L	5	1		U	1	<1	N	
Tin	µg/L	50	10		U	10	<10	N	
Trichloroethylene	µg/L	5	1		U	1	<1	N	
Trichlorofluoromethane	µg/L	100	1		U	1	<1	N	
Vanadium	µg/L	49	2.05		J	5	<5	N	
Zinc	µg/L	5000	4.84		U	5	<5	N	
Section III, RADIONUCLIDES									
Gross Alpha	pCi/L	15	5.65	1.84		1.04	5.65	N	
Gross Beta	pCi/L	50	380	6.04		1.22	380.00	Y	
Total Radium (226+228)	pCi/L	5					17.13	Y	
Section IV, RADIONUCLIDES									
Americium-241	pCi/L	SOA	0.0108	0.222	UI	0.498	<0.498	N	
Cesium-137	pCi/L	SOB	-1.47	1.87	UI	3.09	<3.09	N	
Curium-242	pCi/L	SOA	-0.0446	0.0885	UI	0.304	<0.304	N	
Curium-243/244	pCi/L	SOA	0.053	0.195	UI	0.422	<0.422	N	
Curium-246	pCi/L	SOA	0.0956	0.132	UI	0.239	<0.239	N	
Carbon-14	pCi/L	SOB	150	65.8		105	150.00	Y	
Cobalt-60	pCi/L	SOB	-0.023	1.85	UI	3.57	<3.57	N	
Iodine-129	pCi/L	SOB	25.8	3.33		1.17	25.80	N	
Plutonium-238	pCi/L	SOA	0.489	0.237	J	0.313	<0.313	N	
Plutonium-239/240	pCi/L	SOA	-0.0176	0.049	UIJ	0.165	<0.165	N	
Nickel-63	pCi/L	SOB					<3.57	N	Calibrated to Co-60
Radium-226	pCi/L	SOR	1.53	0.503		0.364	1.53	N	
Radium-228	pCi/L	SOR	15.6	1.34		1.09	15.60	Y	
Strontium-90	pCi/L	SOB	92.7	3.33	J	1.72	>50	Y	Estimated result; probably elevated
Technetium-99	pCi/L	SOB	34.9	11.8		21.5	34.90	N	
Thorium-228	pCi/L	SOA	-0.0465	0.089	UI	0.233	<0.233	N	
Thorium-230	pCi/L	SOA	0.125	0.0935	U	0.101	<0.101	N	
Thorium-232	pCi/L	SOA	0.0054	0.0356	UI	0.101	<0.101	N	
Uranium-233/234	pCi/L	SOA	0.457	0.182		0.0508	0.46	N	
Uranium-235	pCi/L	SOA	0.025	0.078	UI	0.176	<0.176	N	
Uranium-238	pCi/L	SOA	0.135	0.121	UI	0.188	<0.188	N	
Sum of Alphas							1.99	N	
Sum of Betas							226.30	Y	

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