



An Updated Regional Water Table of the Savannah River Site and Related Coverages

by

R. A. Hiergesell

Westinghouse Savannah River Company
Savannah River Site
Aiken, South Carolina 29808

W. E. Jones

DOE Contract No. **DE-AC09-96SR18500**

This paper was prepared in connection with work done under the above contract number with the U. S. Department of Energy. By acceptance of this paper, the publisher and/or recipient acknowledges the U. S. Government's right to retain a nonexclusive, royalty-free license in and to any copyright covering this paper, along with the right to reproduce and to authorize others to reproduce all or part of the copyrighted paper.

Key Words:
Water table
Hydrogeology
Regional

Retention:
Permanent



**AN UPDATED REGIONAL WATER TABLE OF THE
SAVANNAH RIVER SITE AND RELATED COVERAGES**

**R. A. Hiergesell
W. E. Jones**

UNCLASSIFIED
DOES NOT CONTAIN
UNCLASSIFIED CONTROLLED
NUCLEAR INFORMATION

ADC &
Reviewing
Official:

M. Harris
(Mary K. Harris, Manager)

Date: *12/15/03*

DECEMBER 2003

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

**Prepared for the U.S. Department of Energy Under
Contract Number DE-AC09-96SR18500**



DISCLAIMER

This report was prepared for the United States Department of Energy under Contract No. DE-AC09-96SR18500 and is an account of work performed under that contract. Neither the United States Department of Energy, nor WSRC, nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for accuracy, completeness, or usefulness, of any information, apparatus, or product or process disclosed herein or represents that its use will not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, name, manufacturer or otherwise does not necessarily constitute or imply endorsement, recommendation, or favoring of same by Westinghouse Savannah River Company or by the United States Government or any agency thereof. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

Printed in the United States of America

**Prepared For
U.S. Department of Energy**

Key Words:
Water table
Hydrogeology
Regional

Retention:
Permanent

**AN UPDATED REGIONAL WATER TABLE OF THE
SAVANNAH RIVER SITE AND RELATED COVERAGES**

**R. A. Hiergesell
W. E. Jones**

UNCLASSIFIED
DOES NOT CONTAIN
UNCLASSIFIED CONTROLLED
NUCLEAR INFORMATION

ADC &
Reviewing
Official:

M. K. Harris
(Mary K. Harris, Manager)

Date: *12/15/03*

DECEMBER 2003

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

**Prepared for the U.S. Department of Energy Under
Contract Number DE-AC09-96SR18500**



DISCLAIMER

This report was prepared for the United States Department of Energy under Contract No. DE-AC09-96SR18500 and is an account of work performed under that contract. Neither the United States Department of Energy, nor WSRC, nor any of their employees makes any warranty, expressed or implied, or assumes any legal liability or responsibility for accuracy, completeness, or usefulness, of any information, apparatus, or product or process disclosed herein or represents that its use will not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, name, manufacturer or otherwise does not necessarily constitute or imply endorsement, recommendation, or favoring of same by Westinghouse Savannah River Company or by the United States Government or any agency thereof. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

Printed in the United States of America

**Prepared For
U.S. Department of Energy**

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

This report has been reproduced directly from the best available copy.

Available for sale to the public, in paper, from: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

phone: (800) 553-6847,

fax: (703) 605-6900

email: orders@ntis.fedworld.gov

online ordering: <http://www.ntis.gov/help/index.asp>

Available electronically at <http://www.osti.gov/bridge>

Available for a processing fee to U.S. Department of Energy and its contractors, in paper, from:

U.S. Department of Energy, Office of Scientific and Technical Information, P.O. Box 62,

Oak Ridge, TN 37831-0062;

phone: (865) 576-8401,

fax: (865) 576-5728

email: reports@adonis.osti.gov

Rev. 8/21/2003

Key Words:
Water table
Hydrogeology
Regional

Retention:
Permanent

**AN UPDATED REGIONAL WATER TABLE OF THE
SAVANNAH RIVER SITE AND RELATED COVERAGES**

**R. A. Hiergesell
W. E. Jones**

DECEMBER 2003

Westinghouse Savannah River Company
Savannah River Site
Aiken, SC 29808

**Prepared for the U.S. Department of Energy Under
Contract Number DE-AC09-96SR18500**

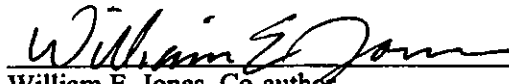


REVIEWS AND APPROVALS


Robert A. Hiergesell, Co-author

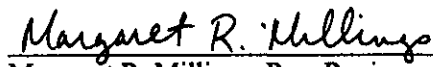
Environmental Sciences and Technology Department

12/3/03
Date


William E. Jones, Co-author

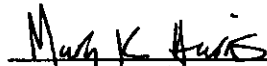
Environmental Sciences and Technology Department

12/3/03
Date


Margaret R. Millings, Peer Reviewer

Environmental Sciences and Technology Department

12/3/03
Date


Mary K. Harris, Technical Reviewer and Manager

Environmental Sciences and Technology Department, Geo-Modeling

12/3/03
Date

TABLE OF CONTENTS

LIST OF FIGURES	iv
LIST OF ACRONYMS	iv
1.0 EXECUTIVE SUMMARY	1
2.0 INTRODUCTION.....	3
3.0 GROUNDWATER AND SURFACE WATER.....	7
3.1 GROUNDWATER AND SURFACE WATER HYDRAULIC CONNECTION	9
4.0 METHOD OF DEVELOPMENT	11
4.1 DATA SOURCES	11
4.2 GENERAL STRATEGY	13
5.0 DATABASE FUNCTIONS AND GIS DEVELOPMENT	17
5.1 DATABASE PROCESSING	17
5.2 DATA INTEGRATION AND USE OF GIS	18
6.0 RESULTS	19
6.1 WATER TABLE CONFIGURATION.....	19
6.2 RELATED HYDROLOGIC COVERAGES	21
7.0 REFERENCES.....	47
APPENDIX A. WELL WATER LEVEL STATISTICS.....	49
APPENDIX B. WELL CONSTRUCTION INFORMATION.....	91

LIST OF FIGURES

Figure 1. Groundwater flow net for a two-dimensional vertical cross-section through an isotropic, homogenous system bounded on the bottom by an impermeable boundary (from de Marsily, 1986).	7
Figure 2. Configuration of water table contours in the vicinity of gaining and losing stream reaches. (from Winter, et. al., 1998)	10
Figure 3. Relationship of fluid level in well to actual water table	16
Figure 4. SRS Regional Water Table Elevation	23
Figure 5. SRS Streams and Groundwater Basins.....	25
Figure 6. Water Table Configuration on the New Ellenton SW 7.5 Minute Quadrangle.....	27
Figure 7. Water Table Configuration on the New Ellenton SE 7.5 Minute Quadrangle.....	29
Figure 8. Water Table Configuration on the Girard NW 7.5 Minute Quadrangle.....	31
Figure 9. Water Table Configuration on the Girard NE 7.5 Minute Quadrangle.....	33
Figure 10. Water Table Configuration on the Jackson 7.5 Minute Quadrangle	35
Figure 11. Water Table Configuration on the New Ellenton 7.5 Minute Quadrangle.....	37
Figure 12. Water Table Configuration on the Windsor 7.5 Minute Quadrangle.....	39
Figure 13. Water Table Configuration on the Long Branch 7.5 Minute Quadrangle.....	41
Figure 14. Water Table Configuration on the Snelling 7.5 Minute Quadrangle	43
Figure 15. Water Table Configuration on the Shell Bluff Landing 7.5 Minute Quadrangle	45

LIST OF ACRONYMS

ERDMS	Environmental Restoration Data Management System
ESRI	Environmental Systems Research Institute, Inc
GIS	Geographic Information System
ShRINE	Savannah River Information Network Environment
SRS	Savannah River Site
SRTC/ES&TD	Savannah River Technology Center/Environmental Sciences and Technology Department
U.S.G.S.	United States Geological Survey

1.0 EXECUTIVE SUMMARY

A new regional-scale map of the water table configuration beneath the Savannah River Site and its surrounding area has been developed. This map is an update to the regional water table map presented in Hiergesell (1998). While similar methods were utilized to develop the updated coverages, increased accuracy was achieved due to several factors, including:

- more data (new wells and additional measurements)
- use of median versus mean water levels for water table contour development
- culling erroneous values from the data records
- eliminating wells discovered to not reflect natural conditions

In general, the greatest degree of improvement is realized at a local-scale where new well data are integrated into water table contours. Also, the incorporation of better analysis of statistical data for wells monitored by SRTC/ES&TD contributes significantly to improving the accuracy of water table contours. In previous versions, only single measurements were available from numerous wells located in remote parts of the site. Locations of the SRTC/ES&TD wells are highly advantageous for reducing uncertainty of the regional configuration of the water table, so routine measurements of water levels in them were obtained over the past few years. As a result, meaningful statistical quantities could be calculated for these important wells and utilized in updating the coverage.

Processing involved the calculation of simple statistical quantities for each well, including the number of measurements in the period of record, mean and median water level elevations, minimum and maximum elevations, standard deviation and standard error of the mean. Well information extracted from the ERDMS database was supplemented with data obtained from the SRTC/ES&TD wells. This approach resulted in the availability of 1,324 wells to guide contour development compared to 946 that were utilized to produce the map that appears in Hiergesell (1998). Also, additional field observations were made to determine the perennial reaches of certain tributaries of the main SRS streams. ArcGis was utilized to integrate the available data and to perform adjustments to the previously existing water table contours. Updates to several other associated regional hydrologic coverages are also presented in this report. These include:

- Extent of continuously flowing natural (perennial) stream reaches at SRS
- Extent of stream reaches that flow artificially, due to SRS operations
- Configuration of groundwater basins associated with each of the major streams at the SRS

This page intentionally left blank.

2.0 INTRODUCTION

Efforts to characterize and monitor groundwater contamination sites at SRS were initiated in the early 1960s and have grown tremendously in the intervening years. As part of the characterization process for individual waste sites, knowledge of groundwater flow directions is needed to determine the direction that plumes of dissolved contaminants are moving (Hiergesell, 1998). Typically, contaminants leach from waste units and migrate vertically downward, carried by infiltrating precipitation through the vadose (unsaturated) zone. Upon reaching the saturated zone, contaminants move predominantly in the horizontal plane in the direction of the slope of this surface, commonly known as the water table. Knowledge of the regional configuration of the water table provides a broad framework within which local-scale depictions of the water table at individual waste sites must be consistent.

Many other justifications exist for developing an improved regional water table coverage, including providing support for the following types of investigations, all of which require a basic knowledge of the spatial configuration of the water table and its long-term average elevation.

- Aiding decisions for long-term monitoring and future site missions
- Site suitability investigations for new SRS facilities
- Input for groundwater flow models – accurate boundary conditions (both local- and regional-scale)
- Support of basic scientific investigations (vadose and saturated zone studies, variability in hydrologic conditions, etc.)

Clearly, the need for an accurate regional water table configuration remains as great today as when the earlier efforts were conducted.

A more rigorous definition of water table is the surface on which the fluid pressure in the pores of a porous medium is exactly atmospheric. The position of this surface is indicated by the level at which water stands in a shallow well, screened along its entire length, and penetrating the surficial deposits just deeply enough to encounter standing water in the bottom (Freeze and Cherry, 1979).

On the regional-scale, an understanding of the configuration of the water table at SRS has evolved through the years, as the body of data used to delineate that surface has increased significantly. Accurate regional-scale water table maps serve as guides for development of more detailed local-scale water table maps near individual waste units.

Since 1993 several studies to delineate the configuration of the regional water table for the SRS were conducted. The first such map developed is described in Nichols and Haselow (1993). The method used for development was an automatic contouring algorithm to contour well data from 1Q91 that employed some knowledge of land surface elevations near perennial streams. Development of the next available regional water table map is documented in Hiergesell (1995). In this investigation, 617 water level measurements obtained from wells during 1Q95 were utilized to construct regional water table contours. These contours were hand drawn at the 20-foot interval and were forced to conform to land surface elevations in the vicinity of flowing streams. Another effort to depict the regional water table surface was presented in Brewer (1998). The approach in this effort was to model a regional water table surface based upon an empirical relationship between the land surface elevation and the long-term mean water levels in wells for areas lacking well data. This relationship was used to extrapolate the position of the water table into areas where no wells existed. Using this relationship a grid was constructed for SRS and a water table elevation assigned to each grid point. The resulting set of values was then kriged and contoured. (Hiergesell, 1998).

This investigation provides an update to the regional water table configuration developed by Hiergesell (1998). The methods described in that report were largely duplicated in this study, except a more extensive well database was employed to calculate statistical quantities from well measurements. Some modifications to the methods were implemented and are documented later in the report. The other coverages that are hydraulically related to the water table and which were presented in Hiergesell (1998) were also updated in this report. These coverages include perennial stream reaches, artificially flowing stream reaches and groundwater recharge basins.

More wells (1,324) were available for use in this investigation than were available for the 1998 effort (946). The same statistical quantities have been calculated as in the previous investigation. These include: the number of measurements of water level elevation obtained in the period of record for each well; the mean and median water level elevations; the maximum, minimum and the range of water level elevations; and the standard deviation and standard error of the mean were calculated. Using this information, a determination was made as to which wells could be considered to be water table wells, or those wells whose water level accurately reflects the position of the water table.

One significant advantage of using the historic records from the database to calculate mean and/or median water levels for use in development of the regional water table configuration is that additional measurements, previously obtained from wells that have now been abandoned, may become available for use (Hiergesell, 1998).

The primary source of water level measurements in wells was the Environmental Restoration Data Management System (ERDMS) database, into which all data acquired from routine SRS groundwater sampling events are stored. The overwhelming majority of wells at SRS are located in close proximity to individual waste units for monitoring the release of contaminants into the subsurface and ERDMS was established to accommodate management of data obtained from these wells.

These data were supplemented with measurements obtained as part of the ongoing monitoring program conducted by SRTC/ES&TD using a separate network of wells. This network includes the "P" cluster wells, from which background water quality and water level information for all SRS aquifers is obtained, and numerous other wells, which are monitored exclusively for water levels. All wells in this network were intentionally installed in remote parts of SRS and, as such, measurements obtained from them have a relatively high value because of the scarcity of information in large areas across SRS where there are no waste units and their associated wells.

This page intentionally left blank.

3.0 GROUNDWATER AND SURFACE WATER

The patterns of shallow groundwater flow beneath SRS have been heavily influenced by incision of the land surface by the network of streams that traverse the landscape. Streams occur in drainageways that serve to divert surface water runoff during times of precipitation events. The process of incision has been ongoing in recent geologic time and continues unabated at present. Due to the erosive force of flowing water, these drainageways have progressively cut deeper into the shallow sedimentary layers through time. The degree of incision is not uniform along a drainageway, but has occurred to a progressively greater degree as one proceeds from headwater of each stream to its mouth. The process has been accelerated in surface drainageways that receive a significant amount of process water discharge at SRS, particularly if the valley reaches above the point of naturally occurring flow (Hiergesell, 1998). The effect of topography on regional groundwater flow systems has been extensively investigated, and more detailed discussions can be found in various texts, including Freeze and Witherspoon (1967), Freeze and Cherry (1979) and Fetter (1988).

Flow nets illustrate the general pattern of regional groundwater movement in shallow aquifers and the relationship of groundwater to surface water. They are useful in depicting how water moves from areas of groundwater recharge (divide areas between streams) to areas of discharge to perennial streams. Such a flow net was developed in Hubbert (1940) for a two-dimensional vertical cross section through an isotropic, homogenous system bounded on the bottom by an impermeable boundary. A similar flow net (de Marsily, 1986) is illustrated below in Figure 1. In this figure, the dashed lines represent groundwater flow lines while the solid lines connect points of equal hydraulic potential. The direction of groundwater movement is from areas of higher potential (areas beneath groundwater divides) toward areas of lower potential (areas near streams).

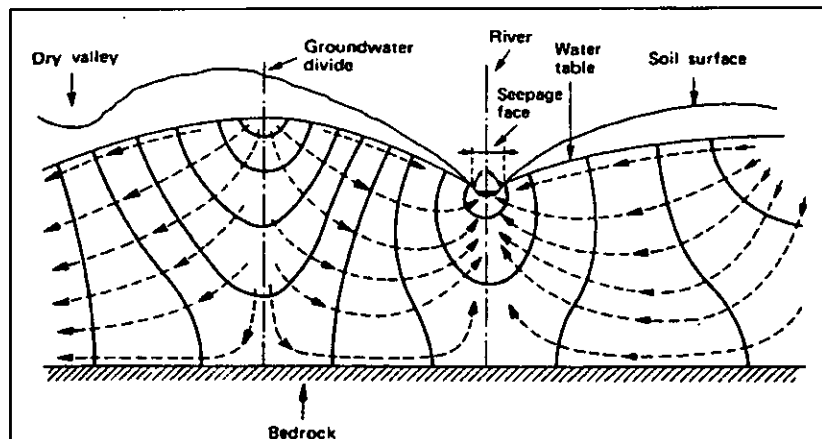


Figure 1. Groundwater flow net for a two-dimensional vertical cross-section through an isotropic, homogenous system bounded on the bottom by an impermeable boundary (from de Marsily, 1986).

Water table elevations in the upland areas are maintained by recharge (infiltration of precipitation at the land surface), while groundwater discharge occurs in the vicinity of flowing streams. Recharge and discharge areas are defined as those areas of the drainage basins where the net movement of groundwater is either away from the water table or toward it (Freeze and Cherry, 1979). In a three-dimensional sense, the water table is generally a subdued expression of the land surface topography. The higher elevations of the water table are located between perennial streams while the lowest areas are located along the streams themselves. Water table divides are roughly coincident with the surface water runoff divides, although the water table occurs at some depth below the land surface (Hiergesell, 1998).

The flow model presented in Figure 1 represents the idealized condition where the recharge of groundwater is assumed to occur at a steady rate through time, and where the sediments through which groundwater moves are homogenous and isotropic with respect to their ability to transmit water. In reality, groundwater recharge varies in response to separate and distinct recharge events, and groundwater flow paths vary due to the presence of heterogeneous and anisotropic sediments. The steady-state groundwater flow concept is still useful, however, when water table fluctuation is small relative to the entire thickness of the water table aquifer and if the water table configuration remains highly similar at all times in the fluctuation cycle (Freeze and Cherry, 1979).

While groundwater recharge rates at SRS vary with respect to time, depending upon specific recharge events, the use of the steady-state concept is thought to be valid for development of a regional-scale water table map for the following reasons:

- The range in water level fluctuation in SRS wells (<10 ft) is minimal compared to the thickness of the water table aquifer and is smaller than the contour interval used to depict the surface (10 feet).
- The water table elevation in the vicinity of perennial stream reaches does not vary significantly in response to the occurrence of separate and distinct recharge events, or to protracted periods of drought or above average rainfall.

The subsurface groundwater flow patterns can deviate from what is normally expected due to the existence of geologic complexity within the flow field. Variation of geologic depositional environments in both the horizontal and vertical direction often creates a hydraulic conductivity distribution field that varies widely within individual units as well as between units. This geologic complexity occurs not only within the saturated subsurface, but also in the overlying unsaturated zone and may lead to complex saturated-unsaturated conditions (Freeze and Cherry, 1979). When a low-permeability clay layer exists within a highly permeable sand unit the formation of a discontinuous saturated lens having unsaturated conditions above and below can occur. These lenses of saturated material are referred to as perched water. Perched lenses can be discontinuous in time as well as space. During periods of increased infiltration of rainwater at the land surface, perched lenses may form above imbedded clay lenses, only to dissipate during dryer times. Perching of groundwater is suspected to occur periodically at some parts of SRS, but is very difficult to verify (Hiergesell, 1998).

Although the term Water Table Aquifer is sometimes used at the SRS, the regional water table is not constrained to occur exclusively within a particular hydrostratigraphic unit, but actually occurs in different aquifers depending upon location. Across much of the SRS, the water table usually occurs within the upper or lower zones of the Upper Three Runs Aquifer. However, along the lower extent of Upper Three Runs Creek, the Upper Three Runs Aquifer has been entirely eroded away and the water table occurs within the underlying Gordon Aquifer.

3.1 GROUNDWATER AND SURFACE WATER HYDRAULIC CONNECTION

Groundwater and surface water are related through the hydraulic connection that exists between the two flow domains. Several significant relationships can be identified that are relevant to this study and which aided the delineation of regional water table contour lines.

A groundwater - surface water relationship of primary importance is the fact that the water table elevation is coincident with the land surface elevation along the reaches of continuously flowing, or perennial, streams. Therefore, where streams are known to be perennial, the water table elevation is known as accurately as the land surface elevation is known at those localities. Land surface elevation is available for the entire SRS and is depicted on the USGS 7.5 minute quadrangle sheets. Erosion along certain stream reaches has also contributed a significant elevation reduction along some minor tributary streams, especially the outfall streams near some of the operations areas. Elevation accuracy along these reaches is considerably less than along other stream reaches, and can range > 20 feet in some locations. Land surface elevations along outfall streams, above the estimated point of natural flow, were not used to develop water table contour configuration (Hiergesell, 1998).

This relationship is particularly powerful for delineating water table configuration at SRS because it is the primary source of information describing the water table elevation over large parts of the site where no other source of information is available. Water table elevations derived from well measurements are more accurate than those derived from land surface elevation near perennial streams. However, wells are located only on a small part of the entire SRS, typically above the groundwater divides in areas close to waste disposal units.

A second significant groundwater - surface water relationship is that hydraulic gradients must exist within the shallow aquifer to either drive groundwater flow toward streams (gaining reach) or away from perennial streams (losing reach). In the humid southeastern U.S. it is much more common for streams to gain flow from the adjacent aquifer. Numerous in-stream measurements of flow rate indicate that streams originating within the SRS boundaries increase in flow rate from their point of effluence to the point where they flow into other, larger, streams and rivers.

This fact is significant in that it implies that a fluid potential gradient must exist within the groundwater flow field near streams that drives groundwater toward the streams. In order for groundwater to move horizontally toward the streams, equi-potential lines (water table contour lines) must assume a "V" shape, with the apex pointing in the upstream direction (Hiergesell, 1998). This relationship is illustrated in Figure 2, where a gaining stream is shown on the left side in A. The water table contours associated with such a stream are shown in B.

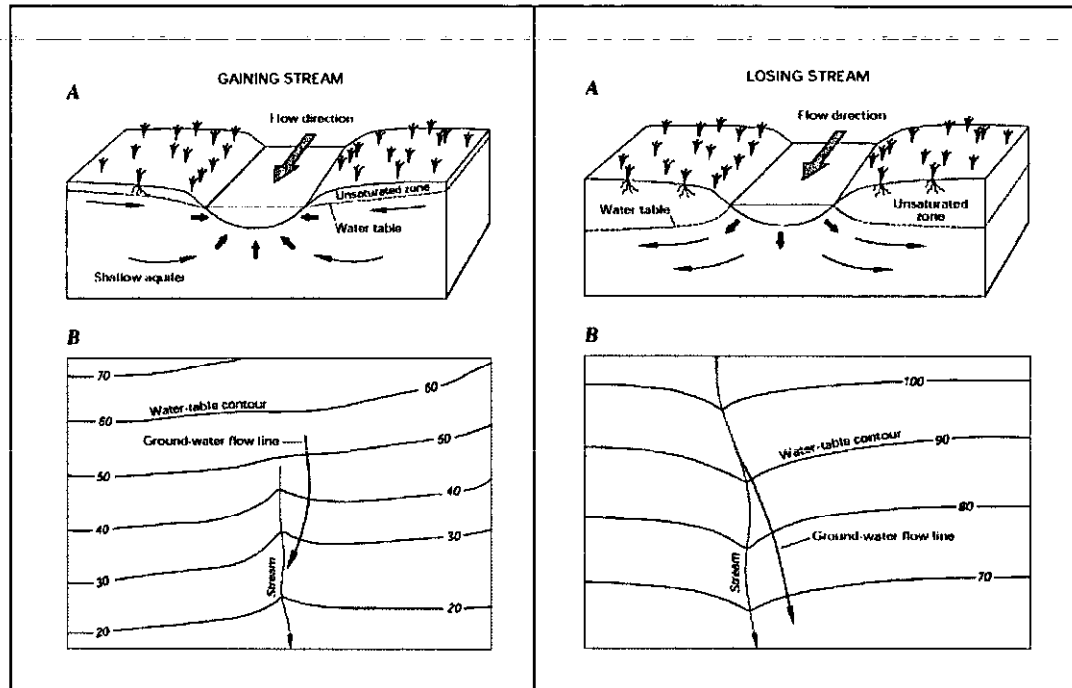


Figure 2. Configuration of water table contours in the vicinity of gaining and losing stream reaches. (from Winter, et. al., 1998)

Some surface water flow at SRS is the result of continuous discharge of process water at the head of surface drainage ways. Such reaches are referred to in this report as artificially flowing stream reaches and represent locations where the groundwater flow system receives increased recharge from the streambed. Two examples of a losing reach exist at the A-01 and A-14 outfalls in the A/M Area. The drainageways below these outfalls flow continuously from the outfall point to the mouth of Tims Branch. One study provides direct evidence that stream flow rate decreases below the A-14 outfall (WSRC-OS-97-00004). The fact that flow decreases along such reaches indicates that surface water is seeping into the streambed and recharges the underlying aquifer. Measurements from nearby wells provide corroborating evidence that groundwater gradients are driving groundwater movement horizontally away from these reaches in the area immediately downstream from the outfalls to a point where Tims Branch begins to gain flow naturally from the shallow aquifers (Hiergesell, 1998).

4.0 METHOD OF DEVELOPMENT

4.1 DATA SOURCES

The sources of data utilized to update the configuration of the long-term regional water table at the SRS included water levels measured in water table wells, land surface elevations originating as land surface contours on U.S. Geological Survey 7.5 Minute quadrangle sheets, and a delineation of perennially flowing streams.

The primary purpose for which the majority of wells installed at SRS was to monitor the migration of dissolved contaminants emanating from waste disposal units, however, these wells are also used to monitor water levels. Samples are routinely collected from these wells as part of the ongoing monitoring program at SRS and both groundwater chemistry data and data describing water levels are stored in the ERDMS database. Depth-to-water measurements are obtained just prior to the collection of water samples for chemical analysis. The ERDMS database is accessed from inside the SRS firewall using the Savannah River Information Network Environment (ShRINE).

A number of observation wells exist at SRS that were not installed specifically to monitor groundwater quality at waste disposal sites and therefore do not have water levels routinely measured as a part of the SRS groundwater monitoring program. Many of these wells are located in remote parts of the site at critical locations for defining the configuration of the regional water table. A program exists within the Savannah River Technology Section (SRTC) Environmental Sciences and Technology Department (ES&TD) to obtain water level measurements from these wells on frequencies ranging from monthly to quarterly. These measurements are stored in an MS Excel spreadsheet database. In this investigation, water-level measurements residing in the ERDMS were extracted and processed using a SAS v. 8.2 program developed by the Statistical Consulting Section of ES&TD. The water levels obtained as part of the ES&TD program were extracted and processed within a MS Excel spreadsheet to calculate the same statistical quantities as those calculated using the extraction program for the ERDMS water level measurements. The data from both sources were integrated into a single file for use in developing the updated water table contours.

The accuracy of water level measurements obtained from wells is assumed to be +/- 0.05 feet (0.6 inches). Factors contributing to this estimate include the accuracy of field surveying, used to establish the elevations of the top of well casings, and the accuracy of electric tapes used to obtain measurements of the depth to water in each well. Sources of uncertainty arise due to the care taken by individual field personnel engaged in obtaining these measurements. It is sometimes difficult to obtain a precise depth measurement due to water wicking up around the electrode at the end of the electric tape. Also, it appears on rare occasions that an electric tape is misread by field personnel or that transcription errors occur in the process of entering water level measurements into the database.

The land surface elevation information was acquired from the U.S.G.S. 7.5-minute quadrangle sheets. The entire SRS is covered by 14 quadrangle sheets, these being:

Girard	Long Branch	New Ellenton SE	Williston
Girard NE	Martin	New Ellenton SW	Windsor
Girard NW	Millett	Shell Bluff Landing	
Jackson	New Ellenton	Snelling	

These quadrangle sheets have land surface elevation contours of 10 feet, although 5-foot contours are shown on some quadrangles in the Savannah River floodplain. The U.S. Geological Survey reports the accuracy of 7.5-minute quadrangle sheets as $\pm \frac{1}{2}$ the contour interval. As a result, the land surface elevation is known to an accuracy of ± 5 feet across the majority of SRS and to ± 2.5 feet at some locations along the Savannah River (Hiergesell, 1998).

Finally, information describing the extent of perennial stream reaches is available on the 7.5 minute quadrangle sheets. Such reaches are indicated with a solid blue line, while intermittently flowing stream reaches are illustrated using a dashed line. The extents of perennial stream reaches, in the headwater regions of streams originating on the SRS, have been corroborated or refuted with numerous field observations obtained wherever possible across SRS. Corrections have been made to the U.S.G.S. delineation, where required.

Some uncertainty exists in the position of the transition from intermittent reaches to continuously flowing reaches. This point is commonly referred to as the point of effluence. Its position can vary to some degree depending on the variability in climatic conditions. During periods of drought, the point of effluence can move in the downstream direction as a result of decreases in the water table elevation near the stream. Conversely, the point of effluence could move in the upstream direction during particularly wet periods when the water table elevation rises. Many small tributaries of perennial streams are not easily accessible to perform ground truth observations. Thus, their status on the U.S.G.S. representation could not be verified. A small amount of uncertainty is associated with the exact position of the main channel of some SRS streams within their floodplain. This uncertainty arises from the U.S. Geological Survey process of establishing the main channels of streams using aerial photographs in localities having extensive forest canopies above the streams. Comparison of Global Positioning System (GPS) coordinates obtained at some locations along SRS streams indicates slight discrepancies of the position of the stream channel with the position indicated on the 7.5-minute quadrangle sheet. GPS accuracy is reported to be ± 10 meters (33 feet) using a single GPS unit while differential positioning accuracy (using 2 GPS units) yield an accuracy of ± 0.5 meters (1.6 ft).

A field survey was conducted (Hiergesell, 1998) in which numerous streams across SRS were observed to determine the perennial extent of streams. The survey was conducted at times of baseflow conditions to allow a delineation of the perennial extent of SRS streams, with particular emphasis on their headwater segments. Field observations were also made in an approximate 5-mile buffer zone immediately outside SRS. However, no such observations were made on the Georgia side of the Savannah River. This information was supplemented with additional field observations obtained since 1998, with emphasis on tributaries to several of the principal SRS streams. Again, observations were made during periods thought to reflect baseflow conditions. Such observations were obtained as work was conducted to characterize the rate of gain in stream flow (from groundwater seepage) along selected SRS perennial streams. These observations are embodied in the associated coverage depicting the extent of perennial stream reaches at SRS.

4.2 GENERAL STRATEGY

The main strategy in creating a regional water table configuration was to integrate all of the available water table elevation measurements obtained from wells with the knowledge of basic hydrologic relationships between groundwater and surface water in the vicinity of perennial streams. The goal was to provide as accurate a delineation of the regional water table across SRS as is possible.

As with the earlier study, one of the key strategies is the use of the steady-state conceptual model to describe the regional water table. The primary method of implementing a steady-state surface was to utilize multiple measurements from individual wells to calculate a representative steady-state water table elevation at each well location. Water table elevations in wells at SRS are known to vary in response to transient recharge events, however the range of fluctuation (mean < 10 feet) is small compared to the thickness of the water table aquifer, thus the criterion identified in Section 3.0 does not preclude this approach. Furthermore, it can be demonstrated that the basic configuration of the water table does not vary greatly from quarter to quarter when only time synchronous measurements are utilized for each map.

The decision to utilize a steady-state conceptual model of the water table has a very practical benefit over the alternative method of using approximately time-synchronous measurements to develop the water table configuration. The benefit is derived from the fact that many more wells are available to calculate a long-term mean elevation than are measured in any specific quarter (Hiergesell, 1998). For example, in 3Q02 only ~370 water table wells had a water level measurement obtained from them, compared to the 1324 water table wells utilized to guide adjustment of water table contours in this investigation. This difference is primarily due to the fact that well samplers do not visit every well at the SRS in any particular quarter. Another factor is that a historical record of water level measurements from a well that has been abandoned can still provide a control point at the location where the well once existed.

One disadvantage of the use of abandoned wells is that the period of record of measurements obtained for some wells does not overlap with the period of record of measurements from newer wells. This is not thought to be a significant disadvantage, however, since the water level calculated for the well is a representative steady-state value. Hence, the advantage of having many more data points available for contour development outweighs this disadvantage (Hiergesell, 1998).

One difference with the earlier investigation is that the representative steady-state water table elevations were estimated by utilizing the median water level elevation calculated for each well instead of the mean water level elevation. The reason for this change was to avoid an extensive data evaluation process needed to cull the obviously spurious measurements that have been recorded in the ERDMS database for some wells. The median of all water level measurements from a given well is less likely to be significantly influenced by one or two measurements that are greatly different from the remaining measurements than is the mean water level elevation. Anomalous measurements were culled from the record for some wells that had statistical quantities that deviated grossly from the range of conditions that could be explained by natural variation in hydrogeologic conditions.

Although most monitoring wells at SRS are water table wells, other wells have their screen zones finished in deeper aquifers and cannot be used to describe the water table. Thus, in order to identify wells that could be used in this study, a distinction was made between water table wells and non-water table wells. A water table well, by strict definition, must have the water level occur within the screen zone. At SRS, wells intended to monitor the water table are installed with a longer screen (20-feet) than wells intended to monitor deeper aquifers (5-feet). Screen length alone, however, cannot be used to identify water table wells since water levels can rise significantly after a well is installed, if the installation occurred when water levels at SRS were at low points during relatively dry periods. According to SRS protocol, water table wells are installed such that the 5 feet of the screen are above the water table and 15 feet are below the water table at the time of installation (WSRC 3Q5).

A strategy was employed to utilize monitoring wells that did not meet the strict definition of water table wells, but which came very close to meeting it. The approach was to utilize wells in which the median water level elevation was slightly higher than the top of the screen zone and then to adjust the median water level elevation to better reflect the position of the true water table outside the well. The justification for this strategy was that many additional wells (334) could be utilized as control points in configuring the water table contour lines.

Except for narrow bands located along SRS streams and within the lower elevations of the Savannah River floodplain, the vertical component of groundwater movement in the shallow subsurface is in the downward direction. As a result, the overwhelming majority of SRS wells have their screens situated within groundwater flow fields in which a vertical downward component of flow exists. For these wells it can be demonstrated that when the water level elevation in a well is positioned slightly above the screen zone, the measured water level will be slightly lower than the true water table outside the well. This is because of a slight head loss that occurs as water migrates vertically downward in the aquifer (i.e., from the water table to the top of the screen zone). Figure 3 illustrates the relationship between the fluid level in a well, screen zone and water table in the aquifer.

A vertical distance of 10 feet was selected to evaluate the magnitude of vertical head loss that would occur under representative hydraulic conditions. Assuming a nominal vertical gradient ($\Delta h/\Delta l$) of 0.1 and the distance of 10 feet over which a drop in hydraulic head could occur, the following calculation was made:

$$\begin{aligned} \text{Equation 4-1} \quad \text{Vertical head loss} &= \left(\frac{\Delta h}{\Delta l} \right) \times (\Delta l) \\ &= \left(\frac{1}{10} \right) \times (10) = 1 \text{ foot} \end{aligned}$$

where:

Δh = magnitude of head loss (feet)

Δl = distance between the top of the screen and the true water table (feet)

$\Delta h/\Delta l$ = vertical gradient (feet/feet)

This calculation indicates that when the water level in a well is positioned 10 feet higher than the top of the screen zone, the true position of the water table in the adjacent aquifer is approximately 1 foot higher than the fluid level in the well.

Assuming the head loss over the vertical distance in the aquifer between the true water table and the top of the screen, (Δl), is linear and the nominal vertical hydraulic gradient is (0.1), an adjusted median water level can be calculated. The adjusted median water level is thought to be a better estimate of the water table elevation in the aquifer. The calculation is made as follows:

$$\text{Equation 4-2} \quad \text{Adjusted Median WL} = \text{median WL} + (\Delta l)/10$$

This relationship was applied to all wells whose median water level fell between the top of the screen and a point 10 feet higher so that those wells that did not meet the strict definition of a water table well could be utilized as control points. The result of this process was that 334 wells that were previously excluded from consideration became available for use as control points. Deviation greater than 10 feet were not considered because of increasing uncertainty in correcting for the position of the true water table.

Estimates of vertical gradients obtained directly from well clusters at SRS were utilized to select the representative vertical gradient of 0.1. Data obtained from the MSB-47 well cluster indicates that vertical gradients range from 0.04 to 0.18 in the shallow saturated zone and is the basis for the nominal 0.1 used in the calculation (Hiergesell, 1994). Similarly, the average calculated vertical gradient below the water table for 9 regional well clusters located across SRS was 0.12.

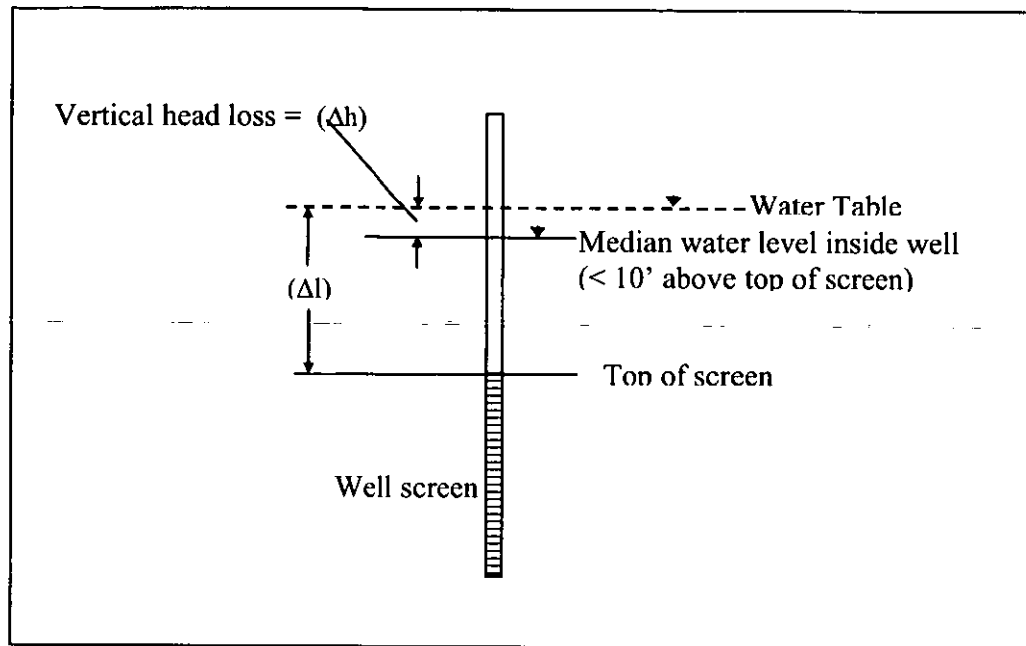


Figure 3. Relationship of fluid level in well to actual water table

5.0 DATABASE FUNCTIONS AND GIS DEVELOPMENT

5.1 DATABASE PROCESSING

Groundwater data at SRS reside in the ERDMS database. Data needed to quantify the position of the regional water table were extracted from ERDMS using SAS v. 8.2 queries to obtain the relevant data for all wells at SRS and to calculate statistical quantities. The statistical quantities calculated for each well included: the number of water level elevations recorded for each well; the maximum, minimum and range of water levels over the period of record; and the mean, median, standard deviation, and standard error of the mean. An additional parameter, the Adjusted Median Water Level, was also calculated for those wells having median water levels occurring < 10 feet above the top of the well screen zone. A total of 334 wells were found to have water levels that occurred in this interval and were able to be utilized as a result of the adjustment. The algorithm used to compute the Adjusted Median Water Level is shown in Equation 4-2.

Initially, a determination was made as to which wells could be regarded as water table wells as per the definition in Section 3.2 and non-water table wells were eliminated from the list. Then a manual screening process was conducted within Excel to identify and remove wells deemed to be inappropriate for use in determining the elevation of the regional water table. These wells included those having multiple screen zones, those that monitor active groundwater remediation systems, and those that are used for groundwater extraction.

Following this, an evaluation of the statistical quantities for all wells was conducted to identify wells having one or more measurements that deviated grossly from conditions that could be explained by ordinary changes in hydrogeologic conditions. For all wells evaluated, the average range of water levels was 12.5 feet, and the average standard deviation was 2.9 feet. Hydrographs for the wells monitored by SRTC/ES&TD, which extend through the wettest and driest extremes of climatic conditions since 1980, indicate that the maximum plausible range of water levels attributable to natural conditions is approximately 25 feet. Numerous wells in the ERDMS database have ranges far in excess of this range, and are likely due to either the influence of subsurface remediation systems or to the inadvertent entry of erroneous measurements into the database. The wells with the most extreme range of water levels were examined by plotting their hydrographs and the obviously erroneous measurements culled from the record. Statistical quantities were re-calculated for those wells. Several wells with highly erratic hydrographs were assumed to be primarily under the influence of remediation systems and were eliminated from the list of wells altogether.

The resulting list of wells was divided into two main categories for use in configuring the regional water table contour lines:

- Primary wells, or those thought to be most dependable for determining the regional water table
- Supplementary wells, or those wells for which only 1-3 measurements exist

Primary wells were given more weight in configuring individual contour lines to reflect the median water table elevation. Supplementary wells were utilized in areas where little other information existed to guide contour configuration. Additionally, when these wells were located close to other primary wells but had median water levels that were significantly different, less significance was attributed to them.

5.2 DATA INTEGRATION AND USE OF GIS

Management of hydrogeologic coverages was conducted using a Geographic Information System (GIS). The particular GIS used was ArcGIS, a product of ESRI, Inc. Specifically, ArcMap Version 8.2 was utilized to superimpose related coverages so water table contours could be configured to honor all relevant data. Hydrographic coverages regarded as relevant to construction of accurate water tables include several existing coverages (surface topographic contours and artificial stream reaches) as well as the new well data and perennial stream observations collected specifically to improve the water table contours in this investigation.

The previously developed regional water table layer was used as a starting point for development of the new configuration. The new tables of well data were loaded and converted to shapefiles. Once posted and labeled, this data served as the primary control for configuring the water table in areas away from perennial streams. The ArcMap editor was then used to adjust water table contours where new data suggested improvements could be made to the previous interpretive configuration (Hiergesell, 1998).

After adjustments to the water table contours were completed, the groundwater basin layer, was superimposed upon it to facilitate updating basin boundaries. Since groundwater basin divides represent no-flow boundaries for the shallow groundwater flow system, their configuration is such that the boundary lines are oriented perpendicular to water table contour lines and parallel to groundwater flow lines.

6.0 RESULTS

6.1 WATER TABLE CONFIGURATION

The work conducted in this investigation has resulted in a significant increase in the accuracy of the water table map for SRS, primarily in the locations where water table wells have been added to the database. This is due primarily to the availability of additional control points used to constrain the water table surface and an increased number of water level measurements in wells since the previous version of the water table configuration was developed. No changes were made to the water table contours in the areas immediately surrounding the SRS.

The total number of wells utilized to adjust water table contour configurations was increased from 946 to 1324 for this investigation. Although many of the additional 378 wells are in areas where many other wells already existed, some occur in areas where no other well information previously existed. Another factor contributing to the increased accuracy was that significant changes to the extent of perennially flowing streams were made along the headwaters of some tributaries to the principal SRS streams. This necessitated modifications to the water table configuration in the vicinity of these reaches. As was the case in the development of the previous version of the water table configuration, a major effort was made to ensure that this stream-aquifer relationship was strictly adhered to at a local scale.

The use of the median water level instead of the mean water level is thought to introduce increased accuracy by minimizing the impact of erroneous measurements for wells that sometimes are found in database records. The average difference between the mean and median water levels for all 1,324 wells is 0.56 feet, while the maximum difference is 8.25 feet. Overall, this resulted in a small but distinct impact on the final configuration of water table contours in locations where many wells exist.

A view of the updated regional water table configuration is illustrated in Figure 4 and the associated hydrologic coverages are shown in Figure 5. The most prominent feature of this water table surface is the high degree to which the water table is controlled by incision of site streams into the shallow sediments. This results in the contour lines being shaped as elongated Vs near perennial streams that point in the upstream direction. The highest elevation of the water table within the SRS boundary is approximately 310 feet above mean sea level, occurring at the peak of the broad water table mound located near the center of SRS. The headwaters of many of the site streams occur on the flanks of this mounded area. Other mound areas occur northeast of the A/M Area, and in the southeastern part of SRS between Lower Three Runs and Meyer Branch. Distinct "ridges" occur along the groundwater divides between surface streams. The lowest water table elevation within the SRS boundary, 70 feet above mean sea level, occurs near the mouth of Lower Three Runs Creek, where it flows into the Savannah River (Hiergesell, 1998).

The water table configuration at the SRS has been altered somewhat from pre-development conditions by the construction of surface water impoundments, most notably L-Lake and Par Pond, but also by several smaller impoundments and along the canal system that was constructed to connect them. Water levels in the lakes and canals are maintained at a constant elevation, hence the water table has reached a new equilibrium level near those locations. The water table configuration developed in this investigation reflects the new equilibrium.

Expanded views of the water table configuration were developed for each of the USGS 7.5 Minute Quadrangle sheets that cover the majority of SRS. These quadrangle sheets are shown in Figures 6-15. The four quadrangle sheets covering the majority of SRS are shown in Figures 6-9. They include the New Ellenton SW, New Ellenton SE, Girard NW and Girard NE quadrangles. The remaining quadrangles cover only small parts of SRS near the boundary, but include the water table configuration in an area several miles beyond the perimeter. These include the Jackson, New Ellenton, Windsor, Long Branch, Snelling, and Shell Bluff Landing quadrangles. Water level configurations outside the SRS boundary are based only on knowledge of the land surface elevations along perennial streams. Water table contours in Georgia have only been developed at the 20-foot interval, compared to 10-foot interval in South Carolina.

In general, the degree of accuracy of the water table elevation is greatest in those areas where groups of wells exist. The accuracy is slightly less where isolated wells exist and along perennial stream reaches. The least accurate parts of the map are at groundwater divide areas where no well measurements are available. Water table contours in these areas were extrapolated based upon the land surface elevations along perennial stream reaches in adjacent areas, and assuming mounding occurs to a similar degree as in other parts of SRS. This situation occurs in three main areas at SRS: the portion of SRS located north of Upper Three Runs Creek and east of Tims Branch, the divide between Upper Three Runs Creek and Tinker Creek, the divide between Tinker Creek and Lower Three Runs Creek and Tinker Creek, and the divide west of Lower Three Runs Creek and east of Steel Creek. Uncertainty in water table elevations at these locations cannot be reduced without the acquisition of additional water table elevation measurements (Hiergesell, 1998).

In general, the greatest degree of improvement was realized at a local scale where the new well data were integrated into the process of configuring water table contours. Most of the new wells are situated close to waste disposal facilities. Also, the incorporation of better analysis of the statistical data for the wells monitored by SRTC/ES&TD contributed significantly to improving the accuracy of water table contours. In previous versions, only single measurements were available from numerous wells located in remote parts of the site. The location of these wells is highly advantageous for reducing uncertainty of the regional configuration of the water table so routine measurements of water levels in them were obtained over the past few years. As a result, meaningful statistical quantities could be calculated for these important wells and utilized in updating the coverage.

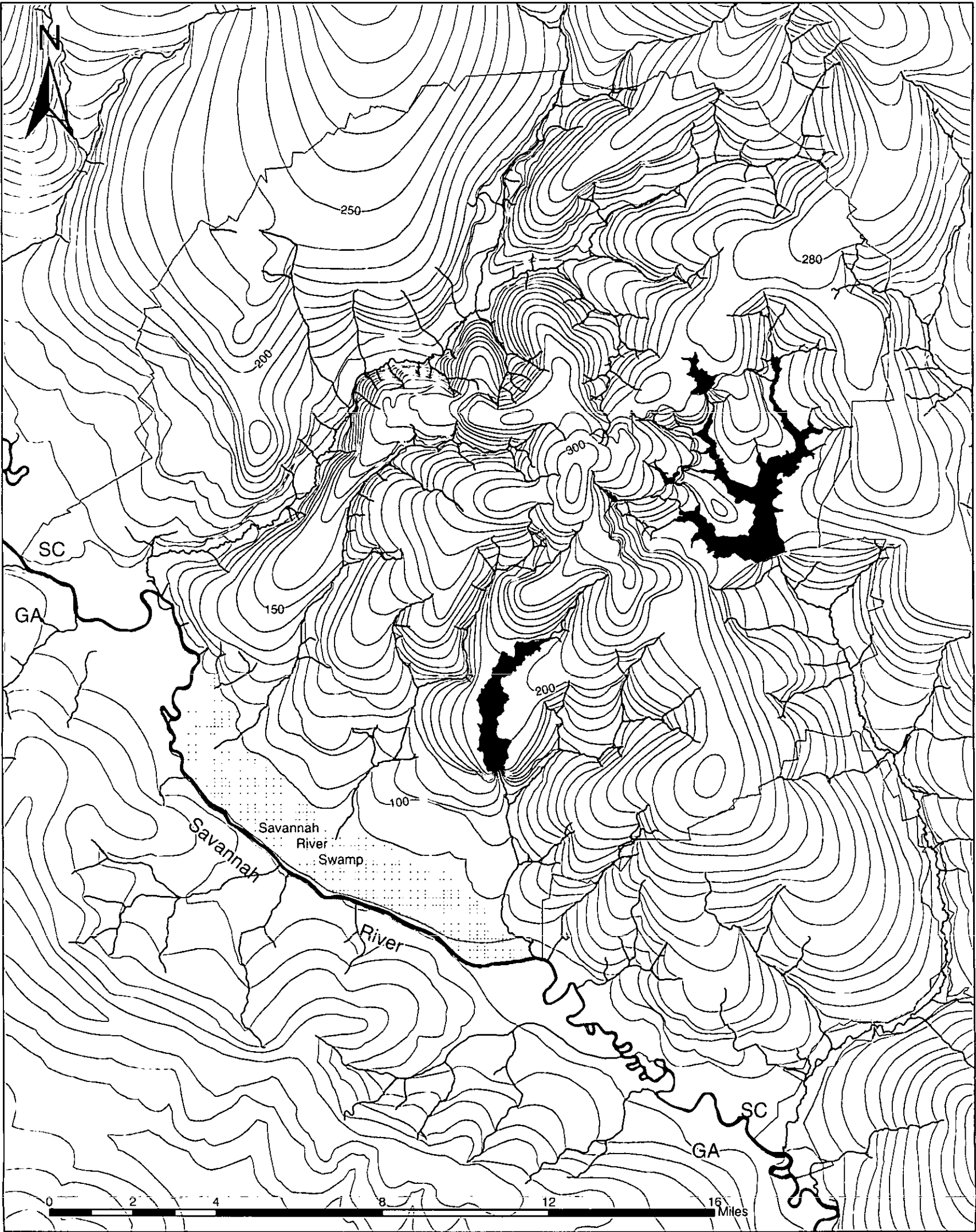
6.2 RELATED HYDROLOGIC COVERAGES

In addition to updating the regional water table, three other related hydrologic coverages were updated as well. These include the perennial, or naturally flowing, stream reaches, artificially flowing stream reaches, and groundwater basin delineations, all of which are presented in Figure 5.

Perennial stream reaches were originally created by digitizing the trace of all flowing stream reaches, as indicated on the USGS 7.5 minute quadrangle sheets. Field observations were made to verify that the indicated perennial reaches from the quadrangle sheets were accurate. Where differences were noted, corrections were made. As part of this investigation, additional field observations were made and additional adjustments incorporated. A coverage closely related to perennial stream reaches is that of artificially flowing stream reaches. This was developed in the previous investigation (Hiergesell, 1998), but was updated slightly in this investigation. Artificially flowing reaches are drainage ways flowing continuously as a result of discharges from SRS operations. These stream segments are indicated as red lines, as opposed to the blue lines on Figure 5.

Delineations of groundwater basins for each of the major drainage ways at SRS are also illustrated in Figure 5. These basins are similar to the surface watershed basins associated with each stream, except that they represent the area where shallow groundwater drains laterally into each stream. Surface and groundwater basin boundaries are nearly coincident, but are not exactly the same. In some places, surface water runoff at a specific point (x,y) may drain toward one site stream, whereas any water infiltrating to the sub-surface at that point would eventually discharge at a different stream. Although most water infiltrating the water table moves laterally and discharges to local streams, some moves downward into deeper aquifers. An unusual groundwater / surface water relationship exists along the western edge of L-Lake. Along this boundary water is seeping out of the lake and into the groundwater system. Groundwater moves directly toward Pen Branch, where it discharges. As a result, water from the Steel Creek basin discharges directly into the Pen Branch basin (Hiergesell, 1998).

This page intentionally left blank.



Legend

Water Table

Perennial Streams

Outfall Streams

SRS

Lakes

Swamp

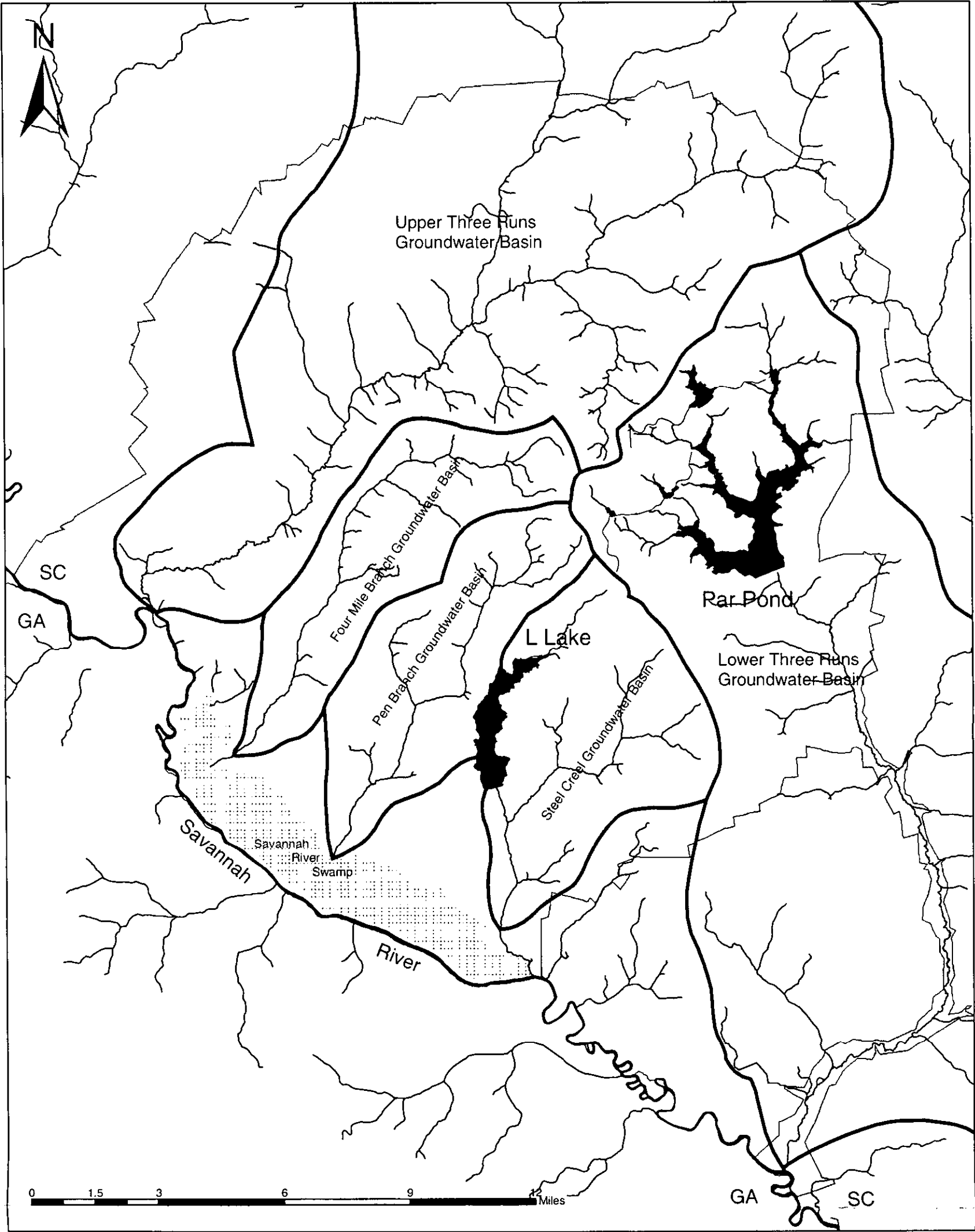
SRS Regional Water Table Elevation

WSRC-TR-2003-00250

Contour Interval: 10 feet in South Carolina and 20 feet in Georgia

Figure 1. SRS Regional Water Table Elevation

This page intentionally left blank.



Legend

- Perennial Streams
- Outfall Streams
- SRS
- Lakes
- Groundwater Basins
- Swamp

SRS Streams and Groundwater Basins

WSRC-TR-2003-00250

Figure 2. SRS Streams and Groundwater Basins

This page intentionally left blank.

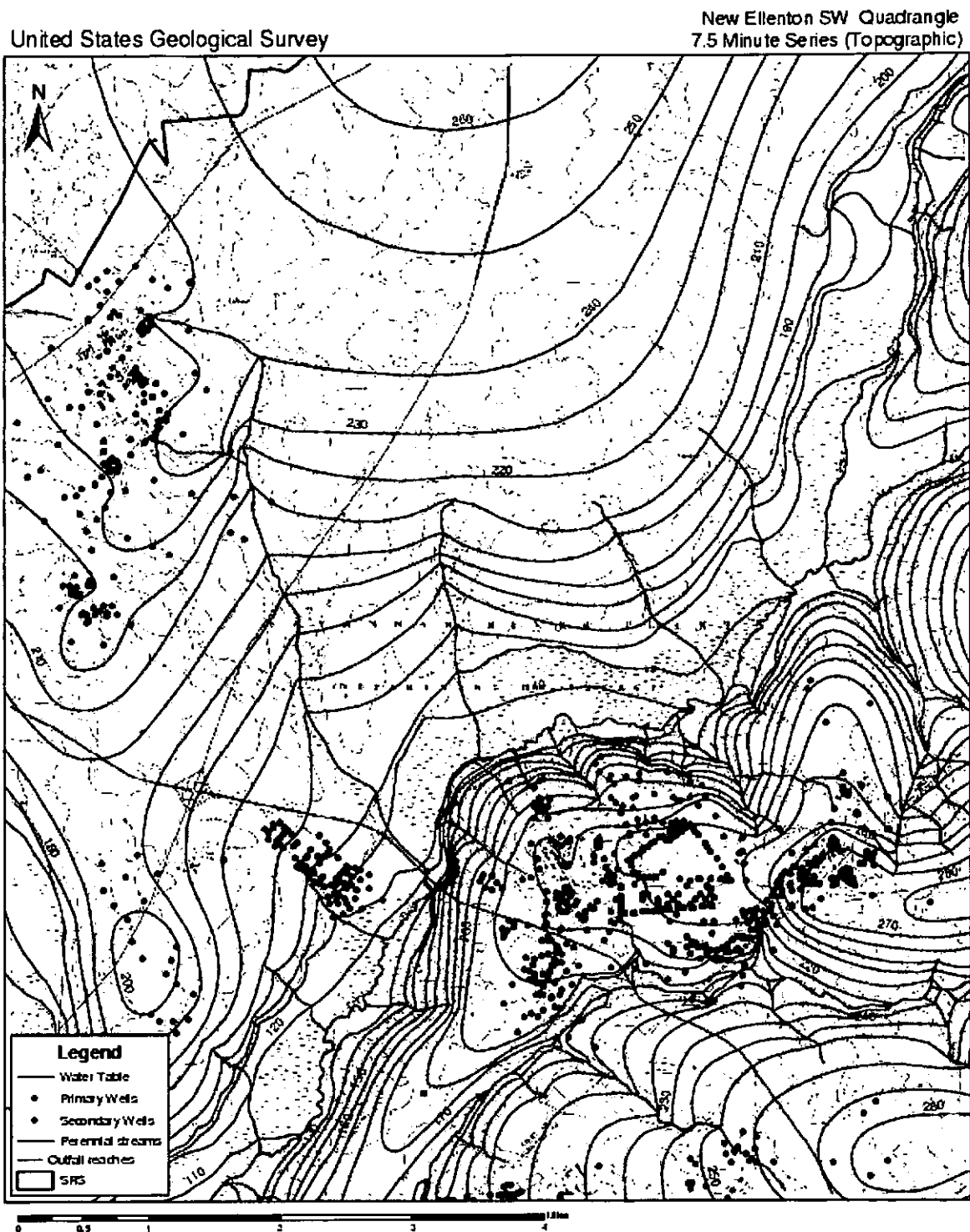


Figure 6. Water Table Configuration on the New Ellenton SW 7.5 Minute Quadrangle

This page intentionally left blank.

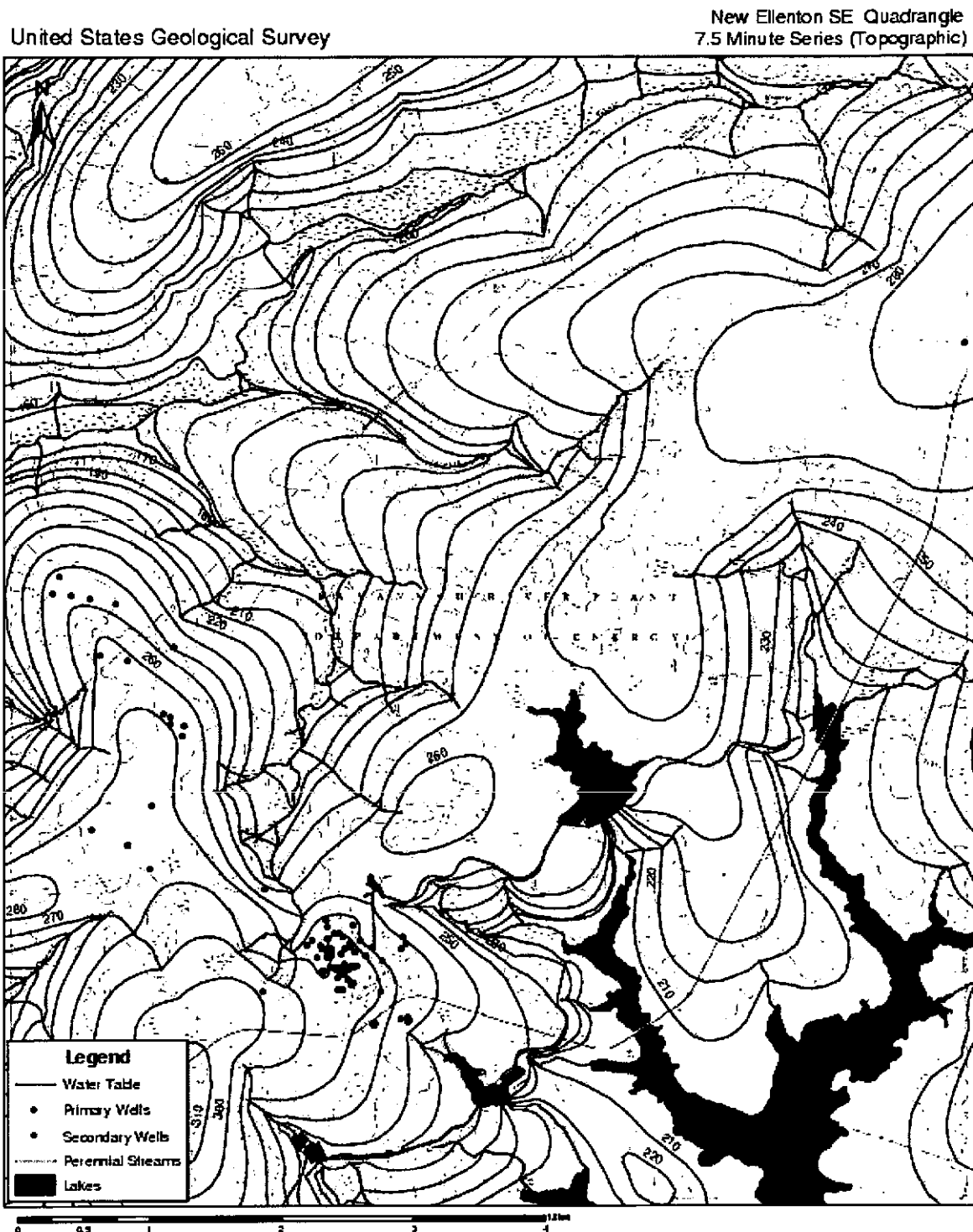


Figure 7. Water Table Configuration on the New Ellenton SE 7.5 Minute Quadrangle

This page intentionally left blank.

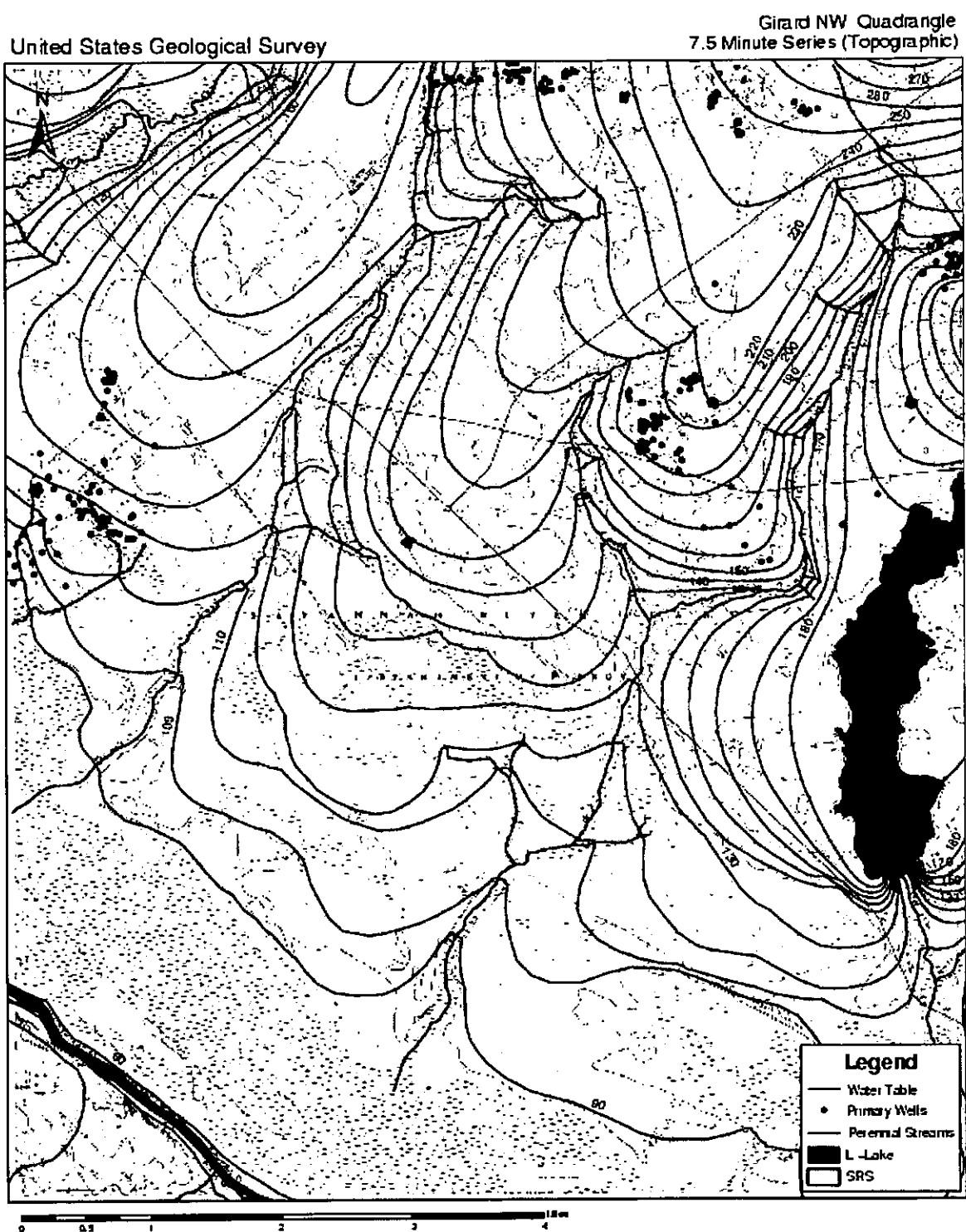


Figure 8. Water Table Configuration on the Girard NW 7.5 Minute Quadrangle

This page intentionally left blank.

United States Geological Survey

Girard NE Quadrangle
7.5 Minute Series (Topographic)

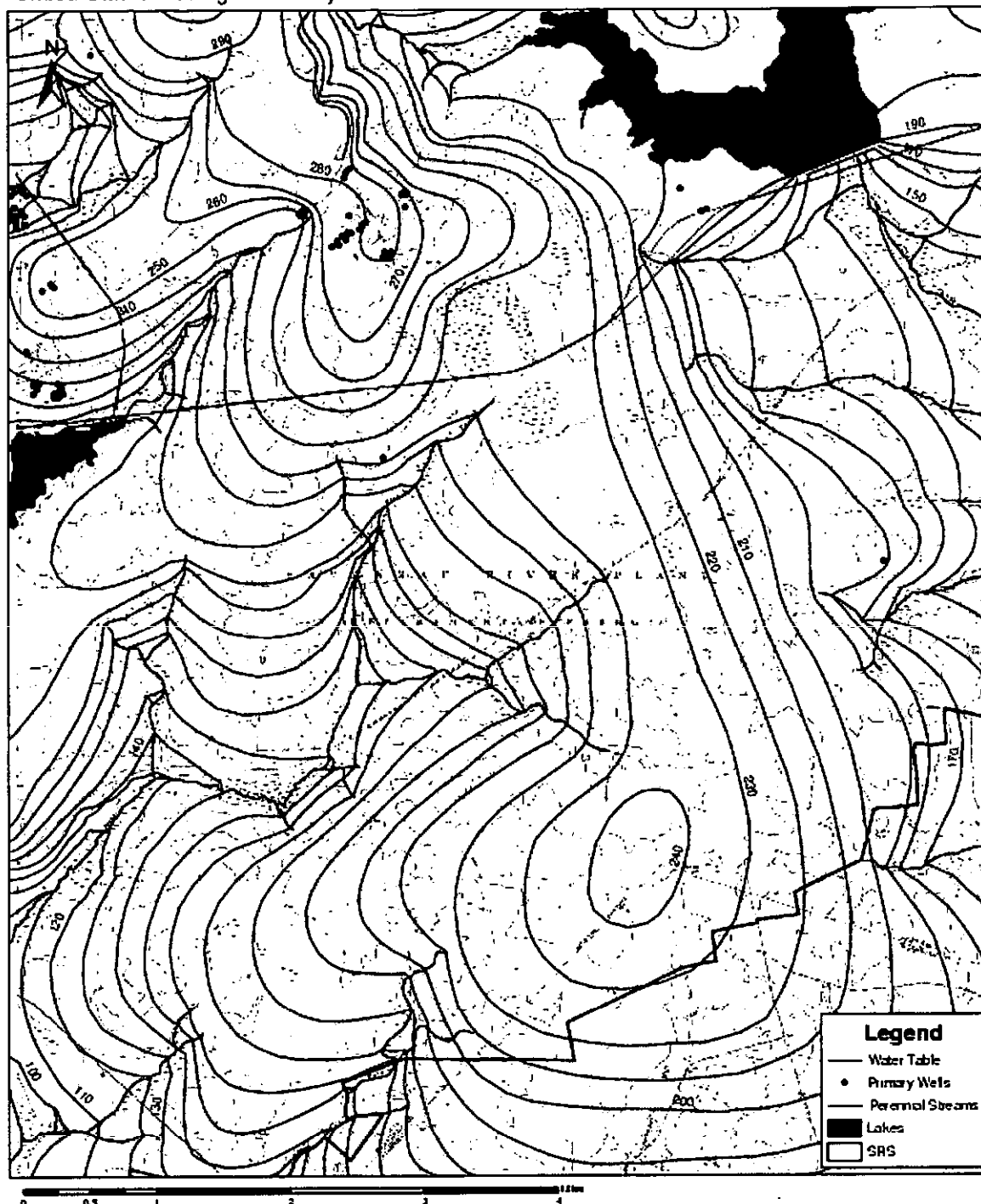


Figure 9. Water Table Configuration on the Girard NE 7.5 Minute Quadrangle

This page intentionally left blank.

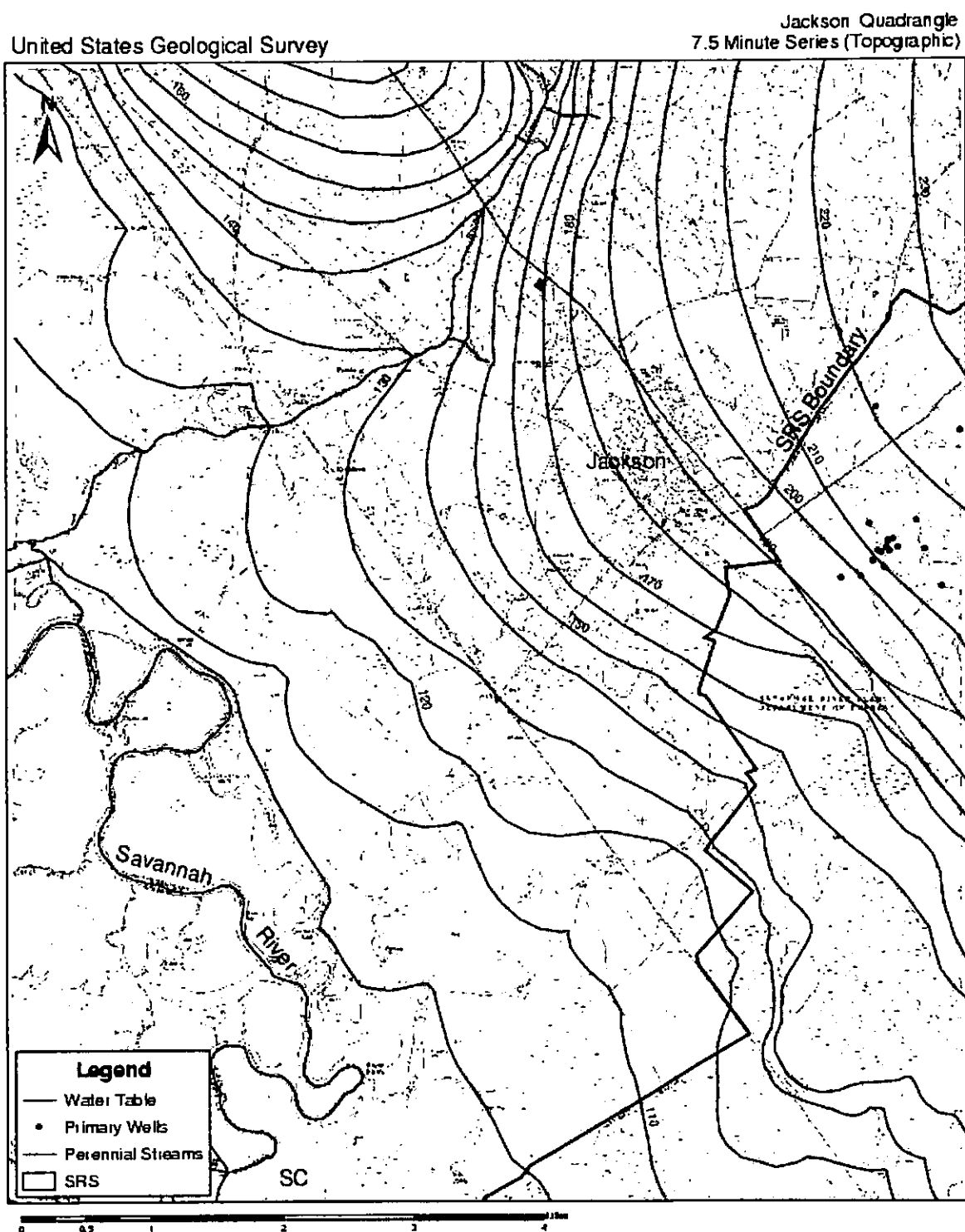


Figure 10. Water Table Configuration on the Jackson 7.5 Minute Quadrangle

This page intentionally left blank.

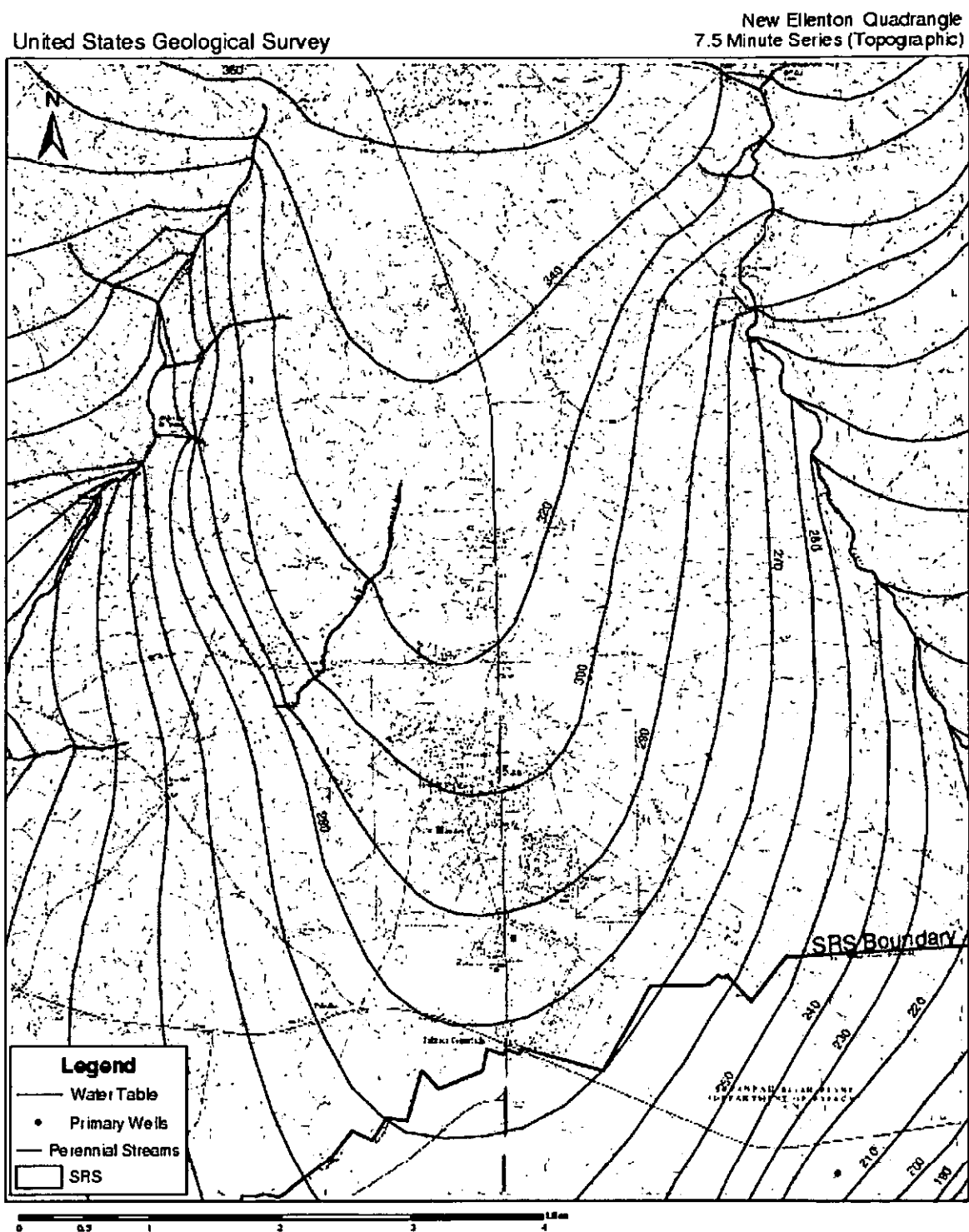


Figure 11. Water Table Configuration on the New Ellenton 7.5 Minute Quadrangle

This page intentionally left blank.

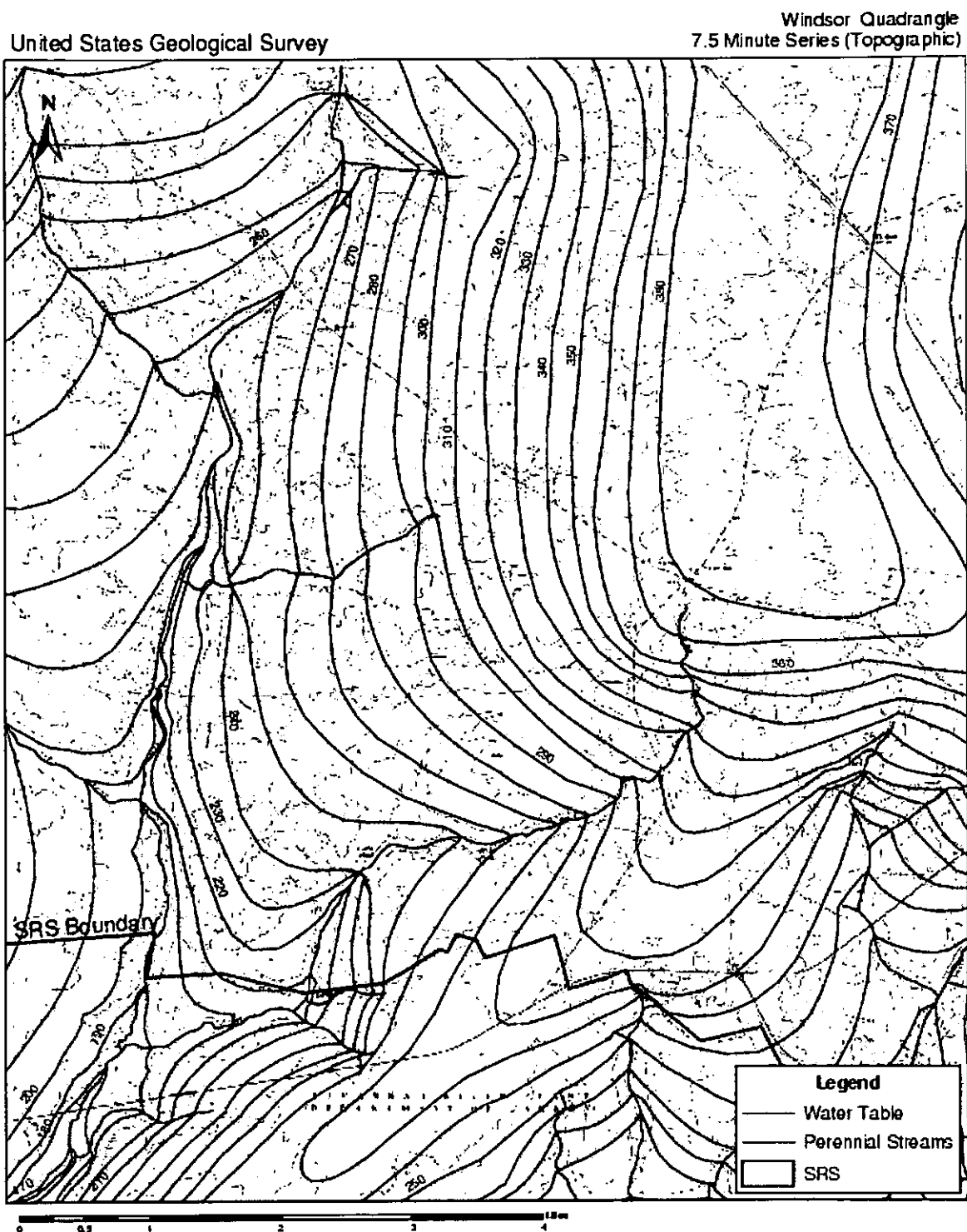


Figure 12. Water Table Configuration on the Windsor 7.5 Minute Quadrangle

This page intentionally left blank.

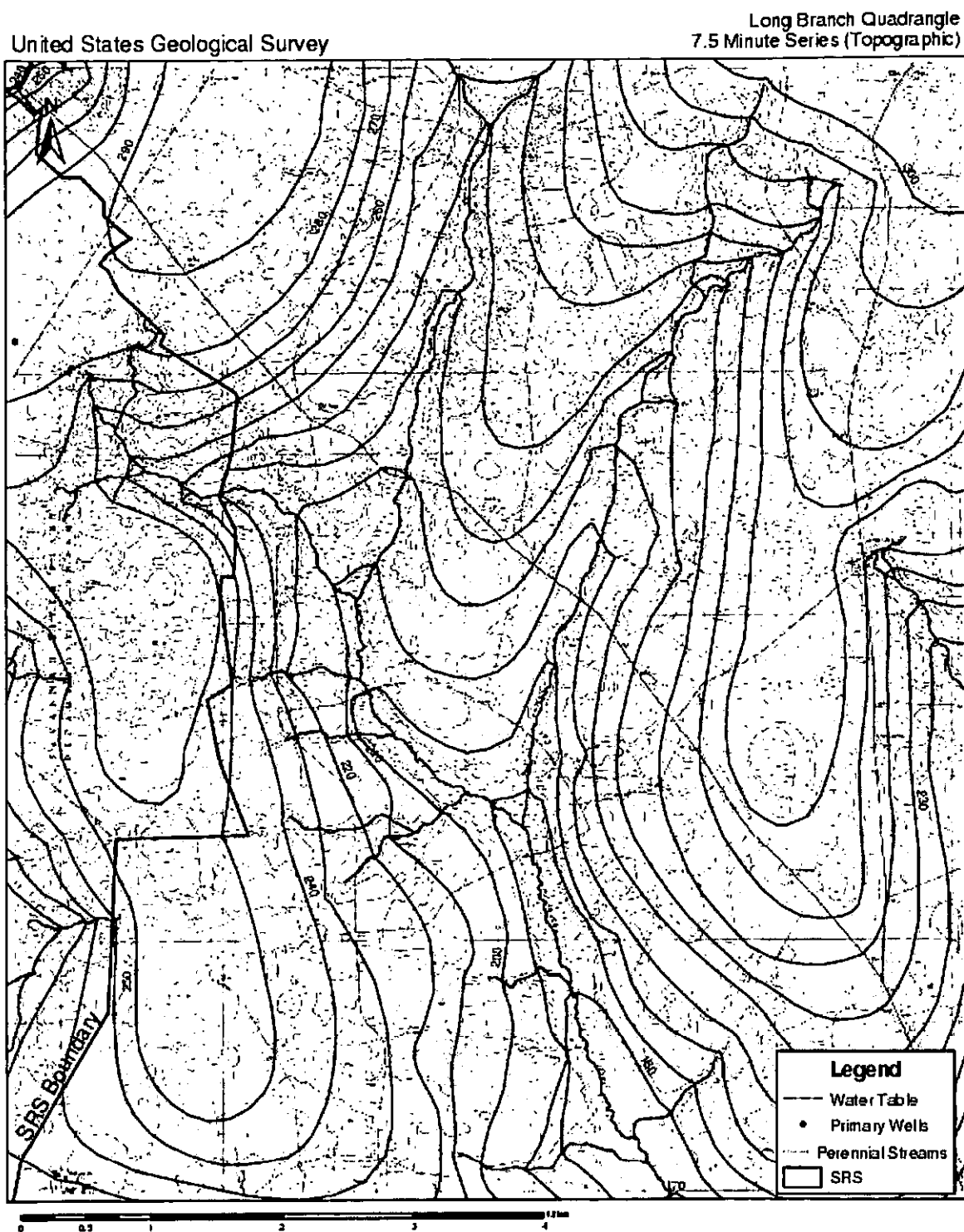


Figure 13. Water Table Configuration on the Long Branch 7.5 Minute Quadrangle

This page intentionally left blank.

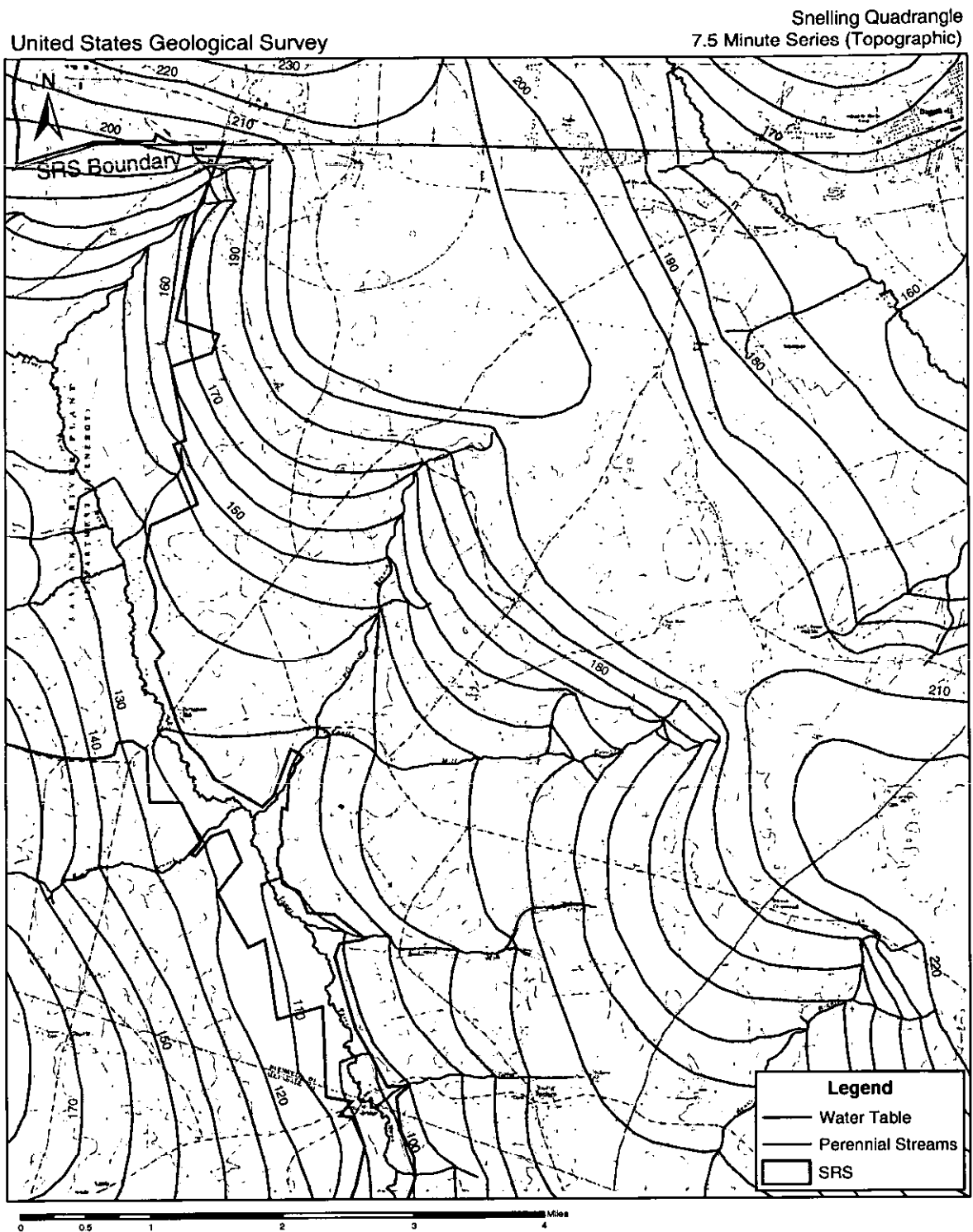


Figure 14. Water Table Configuration on the Snelling 7.5 Minute Quadrangle

This page intentionally left blank.

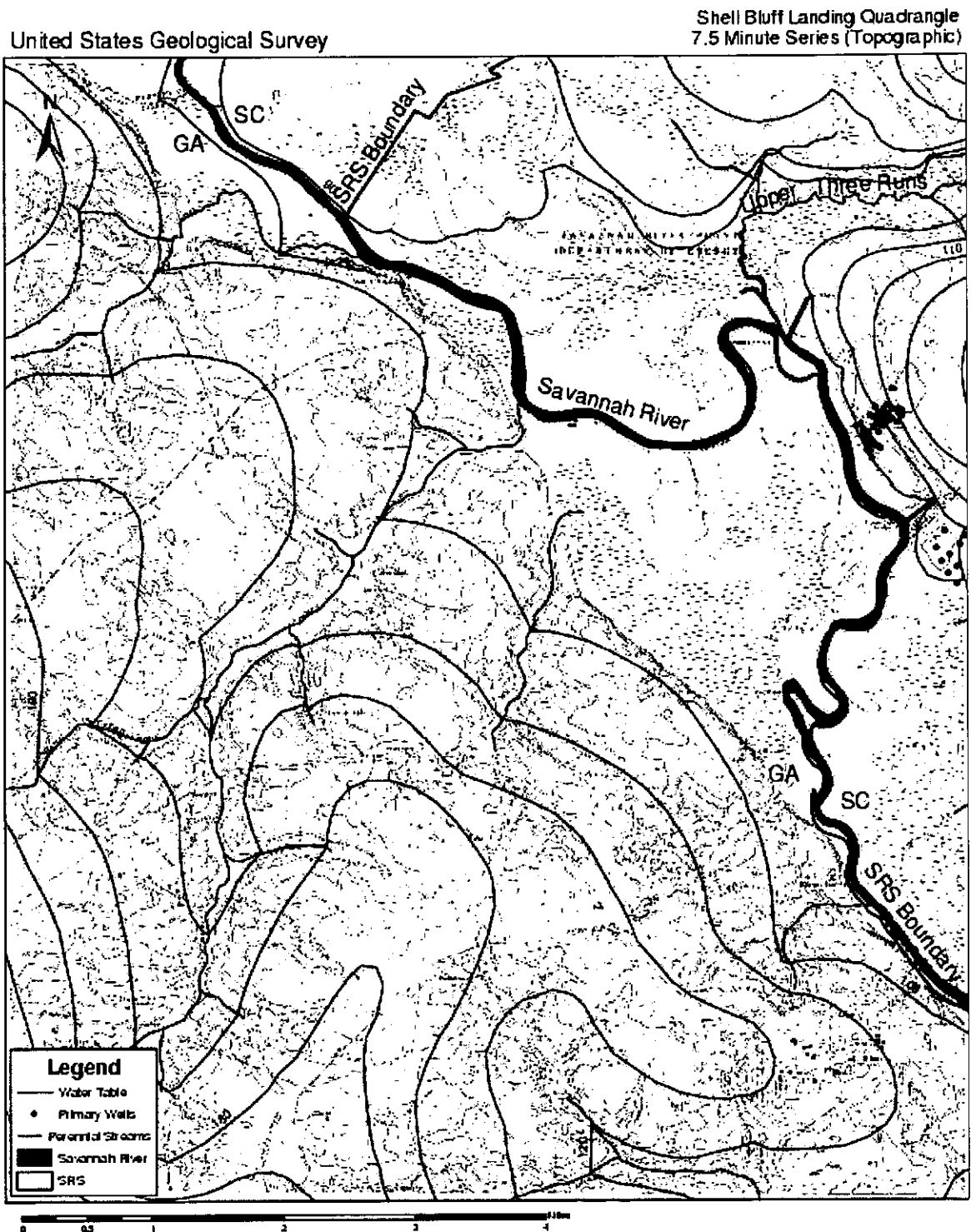


Figure 15. Water Table Configuration on the Shell Bluff Landing 7.5 Minute Quadrangle

This page intentionally left blank.

7.0 REFERENCES

- Brewer, K.E., 1998, SGS Water Table Mapping Documentation. PECD-SGS-98-154, August 17, 1998.
- DeMarsily, G., 1986, Quantitative Hydrogeology, Groundwater Hydrology for Engineers, Academic Press, Inc., Orlando, FL. 440 p.
- Fetter, C.W., 1988, *Applied Hydrogeology* (2nd Edition), Merrill Publishing Co., Columbus, Ohio, 592p.
- Freeze, R.A., and J.A. Cherry, 1979, Groundwater, Prentice-Hall, 604 p.
- Freeze, R.A., and P.A. Witherspoon, 1967, *Theoretical analysis of regional groundwater flow: Effects of water table configuration and subsurface permeability variation*, Water Resources Research 3, pp. 623-634.
- Hiergesell, R.A., 1994, *Hydrologic Analysis of Data from the Lower Lost Lake Aquifer at Recovery Well RWM-12*. WSRC-TR-93-666, Westinghouse Savannah River Company, Aiken, SC 29808.
- Hiergesell, R.A., 1995, *A regional water table map for the Savannah River Site, 1Q95*, WSRC-MS-95-0524, Westinghouse Savannah River Company, Aiken, SC 29808.
- Hiergesell, R.A., 1998, *A regional water table map for the Savannah River Site and related coverages*, WSRC-TR-98-0045, Westinghouse Savannah River Company, Aiken, SC 29808.
- Hubbert, M.K., 1940, The theory of groundwater motion. J. Geology, 48, pp785-944.
- Nichols, R. L. and J.S. Haselow, 1993, Potentiometric map of the Upper Three Runs/Steed Pond aquifers (Water table map), first quarter 1991. Figure contained in *Hydrogeologic Framework of West-Central South Carolina*, Aadland, R.K., J.A. Gellici, and P.A. Thayer, South Carolina Water Department of Water Resources, Water Resources Division Report 5.
- WSRC-3Q5, Hydrogeologic Data Collection, Westinghouse Savannah River Company, Aiken, SC.
- WSRC-OS-97-00004, *Tim's Branch Drainage Area Stream Flow and Analysis Study*, E.I. du Pont de Nemours & Company, Inc., Savannah River Plant, Aiken, SC.
- Winter, T.C., and J.W. Harvey, O. L. Franke, and W.M. Alley, 1998, *Ground Water and Surface Water*, U.S. Geological Survey Circular 1139.

This page intentionally left blank.

APPENDIX A
WELL WATER LEVEL STATISTICS

This page intentionally left blank.

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
ABP 1DD	31	230.9	221.2	9.7	225.8	225.9	225.9	2.15	0.39	23-Sep-99
ABP 2DD	31	225.4	219.0	6.4	222.4	222.8	222.8	1.63	0.29	23-Sep-99
ABP 3	79	229.40	215.48	13.92	223.9	224.2	224.2	2.75	0.18	7-May-03
ABP 4	90	240.9	213.2	27.6	221.4	221.6	222.5	4.12	0.43	14-May-03
ABP 4DD	31	250.7	205.0	45.7	223.7	223.8	223.8	6.22	1.12	23-Sep-99
ABP 6D	32	224.9	213.1	11.8	222.1	222.7	222.7	2.25	0.40	13-May-03
ABP 7D	31	226.4	214.0	12.4	223.1	223.7	223.7	2.35	0.42	13-May-03
ABP 8C	89	199.37	188.29	11.08	195.3	196.4	196.9	3.31	0.24	8-May-03
ABP 8D	60	225.3	214.3	11.0	221.5	222.4	222.4	2.66	0.34	7-May-03
ABP 9D	24	224.5	214.9	9.7	222.7	223.5	223.5	2.21	0.45	7-May-03
ABP 10D	26	218.3	209.6	8.7	216.6	217.1	217.1	1.85	0.36	7-May-03
AC 2B	75	232.1	219.4	12.8	227.0	227.3	227.3	2.05	0.24	4-Apr-03
AC 3B	77	222.1	202.6	19.5	211.1	212.2	212.2	3.31	0.38	3-Apr-03
ACB 1A	79	248.1	229.5	18.6	238.1	238.2	238.2	3.64	0.41	24-Oct-00
ACB 2A	85	247.8	229.8	18.0	238.5	239.4	239.6	3.89	0.25	7-Jan-03
ACB 3A	85	249.0	232.1	16.9	239.8	240.1	240.5	3.35	0.36	24-Oct-00
ACB 4A	80	248.4	231.9	16.6	238.9	239.1	239.1	3.33	0.37	14-Aug-00
AMB 1A	17	244.2	236.1	8.1	239.5	238.6	238.6	2.82	0.68	27-May-88
AMB 2	17	244.2	236.2	8.0	239.5	238.8	238.8	2.78	0.67	27-May-88
AMB 3A	17	244.7	236.4	8.3	239.2	238.2	238.2	2.69	0.65	27-May-88
AMB 4	13	235.1	230.3	4.8	232.7	232.8	232.8	1.54	0.43	23-Aug-91
AMB 4D	67	235.0	223.1	11.8	231.5	232.6	232.6	3.05	0.20	27-Aug-02
AMB 5	79	235.5	222.4	13.1	231.7	233.1	233.1	3.60	0.23	3-Apr-03
AMB 6	70	235.6	227.1	8.5	232.9	233.2	233.2	2.05	0.13	20-Mar-01
AMB 7	84	235.9	225.7	10.2	232.7	233.5	233.5	2.55	0.17	14-Jan-02
AMB 8D	81	235.6	224.7	11.0	231.8	232.5	232.5	3.13	0.35	3-Apr-03
AMB 9D	85	236.0	222.7	13.2	231.5	232.2	232.2	3.57	0.39	3-Apr-03
AMB 10D	79	237.6	189.1	48.5	232.5	234.0	234.0	6.27	0.71	3-Apr-03
AMB 10DD	54	359.7	343.4	16.3	357.9	358.9	358.9	3.16	0.43	22-Sep-99
AMB 11D	84	352.3	224.2	128.1	234.9	234.1	234.1	13.54	1.48	3-Apr-03
AMP 1D	2	234.2	234.0	0.3	234.1	234.1	234.3	0.20	0.14	9-Dec-98
AOB 1	100	247.3	226.8	20.5	235.9	236.2	236.2	4.15	0.26	3-Apr-03
AOB 2	87	247.3	228.6	18.7	236.3	236.7	236.7	4.27	0.27	19-Mar-01

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
AOB 3	64	239.8	226.4	13.5	236.7	237.4	237.4	2.96	0.37	28-Dec-00
ARP 1A	85	224.6	204.9	19.7	216.0	216.7	216.7	4.35	0.29	20-May-03
ARP 3	98	228.8	215.6	13.2	221.9	222.0	222.4	2.46	0.16	8-Apr-02
ARP 3DR	31	217.5	192.7	24.8	209.3	210.0	210.3	6.49	0.44	6-May-03
ARP 4	86	226.1	202.3	23.7	217.8	218.7	218.7	4.50	0.30	7-May-03
ARP 5D	71	222.9	205.4	17.6	215.4	216.1	216.1	5.93	0.70	12-May-03
ARP 8D	27	218.8	200.0	18.8	209.2	209.4	209.4	4.55	0.87	14-May-03
ARP 9D	24	215.2	200.2	15.0	208.8	208.2	208.2	4.41	0.90	14-May-03
ARP 10D	25	220.1	203.5	16.6	215.7	218.0	218.0	5.60	1.12	14-May-03
ARP 11D	16	216.9	208.5	8.5	212.3	212.5	212.5	2.87	0.72	14-May-03
ARP 16D	29	216.0	205.5	10.5	210.6	210.1	210.1	2.74	0.51	8-May-03
ARP 19DR	2	205.5	205.1	0.4	205.3	205.3	205.3	0.28	0.20	7-May-03
ARP 21C	1	194.7	194.7	0.0	194.7	194.7	195.6			7-May-03
ARP 21D	3	206.5	206.4	0.1	206.4	206.4	206.4	0.04	0.02	7-May-03
ASB 1A	89	244.6	221.4	23.2	236.9	237.4	237.4	4.49	0.29	3-Apr-03
ASB 2A	45	245.9	235.4	10.5	239.3	238.6	238.6	2.68	0.40	26-Mar-93
ASB 2AR	67	240.4	230.1	10.4	236.7	238.0	238.0	3.11	0.38	3-Apr-03
ASB 3A	45	244.9	236.2	8.7	239.7	239.4	239.4	2.23	0.33	26-Mar-93
ASB 3AR	65	241.0	229.8	11.2	236.9	238.3	238.3	3.44	0.43	3-Apr-03
ASB 4	109	278.5	231.3	47.3	238.2	238.2	238.2	6.21	0.59	27-Feb-03
ASB 5A	46	244.1	232.8	11.3	238.2	237.6	237.6	2.53	0.37	26-Mar-93
ASB 5AR	72	246.2	223.0	23.2	233.9	236.0	236.0	5.31	0.63	3-Apr-03
ASB 6	1	238.2	238.2	0.0	238.2	238.2	238.2			13-Jan-96
ASB 6A	109	248.7	209.1	39.6	235.5	236.6	236.6	5.15	0.49	3-Apr-03
ASB 7	37	238.6	232.2	6.4	235.4	235.3	235.7	1.72	0.28	26-Mar-93
ASB 8	101	238.3	221.6	16.7	232.7	233.6	234.3	3.42	0.34	3-Apr-03
ASB 9	82	244.0	233.7	10.2	240.4	241.1	241.6	2.44	0.16	1-Apr-03
BG 26	7	241.7	238.2	3.5	239.7	239.9	240.8	1.22	0.46	9-Apr-88
BG 27	7	242.7	238.2	4.5	240.7	241.1	241.1	1.48	0.56	9-Apr-88
BG 28	7	248.4	243.5	4.9	246.0	245.7	245.7	1.73	0.65	9-Apr-88
BG 29	7	245.6	241.6	4.0	243.8	244.0	244.0	1.42	0.54	9-Apr-88
BG 30	7	244.1	236.8	7.3	240.0	241.1	241.1	2.70	1.02	9-Apr-88
BG 31	7	234.2	231.5	2.7	233.1	233.2	233.2	0.99	0.37	9-Apr-88

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
BG 32	7	233.7	230.9	2.8	232.5	233.0	233.0	1.06	0.40	9-Apr-88
BG 33	7	233.2	231.0	2.2	232.3	232.6	232.6	0.97	0.37	9-Apr-88
BG 34	7	233.6	231.4	2.2	232.6	232.4	232.4	0.75	0.28	9-Apr-88
BG 35	7	234.1	231.8	2.3	232.9	232.8	232.8	0.69	0.26	9-Apr-88
BG 36	7	234.0	231.3	2.7	232.5	232.3	232.3	0.95	0.36	9-Apr-88
BG 37	7	233.9	231.3	2.6	232.6	232.4	232.4	0.85	0.32	9-Apr-88
BG 38	7	233.9	231.1	2.8	232.3	232.0	232.0	0.91	0.35	9-Apr-88
BG 39	7	233.8	231.0	2.8	232.1	232.2	232.2	1.00	0.38	9-Apr-88
BG 40	7	233.6	230.4	3.2	231.7	231.4	231.4	1.09	0.41	9-Apr-88
BG 41	7	233.0	230.4	2.6	231.3	231.1	231.1	0.91	0.35	9-Apr-88
BG 42	7	233.0	230.1	2.9	231.2	231.1	231.1	1.07	0.40	9-Apr-88
BG 43	6	232.9	230.1	2.8	231.5	231.2	231.2	1.22	0.50	3-May-88
BG 51	7	242.7	238.2	4.5	240.7	240.7	240.7	1.49	0.56	23-Feb-88
BG 52	31	233.3	227.0	6.3	229.5	229.6	229.6	1.56	0.28	10-Sep-94
BG 53	14	236.7	226.9	9.8	229.4	228.9	228.9	2.59	0.69	22-Jan-90
BG 54	34	233.2	225.2	8.0	228.7	228.5	228.5	1.67	0.29	17-May-95
BG 55	34	232.4	211.9	20.5	226.8	227.0	227.0	3.08	0.53	16-Mar-95
BG 56	14	253.9	224.1	29.8	227.7	225.4	225.4	7.64	2.04	22-Jan-90
BG 57	14	228.6	224.9	3.7	226.1	225.3	225.3	1.38	0.37	22-Jan-90
BG 58	14	229.7	225.7	4.0	227.4	227.2	227.2	1.32	0.35	22-Jan-90
BG 59	31	234.2	227.3	6.9	230.0	230.2	230.2	1.96	0.35	10-May-94
BG 60	31	235.5	228.0	7.5	231.0	230.5	230.5	1.98	0.36	10-May-94
BG 61	31	238.6	226.5	12.1	233.2	233.8	233.8	2.39	0.43	10-May-94
BG 63	15	241.2	233.8	7.4	236.7	236.2	236.2	2.50	0.65	10-May-94
BG 64	15	244.5	236.4	8.1	239.3	238.7	238.7	2.27	0.59	10-May-94
BG 65	15	243.4	234.4	9.0	237.2	236.3	236.3	2.78	0.72	10-May-94
BG 66	14	241.6	233.0	8.6	236.4	236.0	236.0	2.50	0.67	22-Jan-90
BG 67	33	247.2	233.2	14.0	236.8	236.0	236.0	2.79	0.48	16-Mar-95
BG 68	3	233.2	232.2	1.0	232.8	233.0	233.0	0.52	0.30	12-Feb-88
BG 69	3	232.9	232.5	0.4	232.7	232.8	232.8	0.22	0.13	12-Feb-88
BG 71	3	232.8	232.3	0.5	232.6	232.7	232.7	0.29	0.17	4-Dec-87
BG 72	3	242.8	230.9	11.9	235.4	232.5	232.5	6.46	3.73	4-Dec-87
BG 73	3	233.1	225.5	7.6	230.4	232.6	232.6	4.27	2.46	4-Dec-87

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
BG 74	3	232.9	225.0	7.9	230.2	232.6	232.6	4.50	2.60	4-Dec-87
BG 75	3	232.8	227.2	5.6	230.9	232.8	232.8	3.22	1.86	4-Dec-87
BG 76	3	233.7	231.6	2.1	232.3	231.7	231.7	1.18	0.68	30-Nov-87
BG 77	3	231.9	224.6	7.3	229.3	231.5	231.5	4.10	2.37	30-Nov-87
BG 78	3	232.7	231.7	1.0	232.1	232.0	232.0	0.52	0.30	30-Nov-87
BG 79	3	233.6	231.5	2.1	232.2	231.6	231.6	1.18	0.68	30-Nov-87
BG 80	3	233.0	232.7	0.3	232.9	232.9	232.9	0.14	0.08	7-Mar-88
BG 81	3	233.0	227.4	5.7	231.1	232.8	232.8	3.21	1.85	7-Mar-88
BG 84	3	232.8	232.6	0.2	232.7	232.7	232.7	0.11	0.06	12-Feb-88
BG 85	3	232.8	232.6	0.3	232.7	232.8	232.8	0.14	0.08	12-Feb-88
BG 86	3	232.9	232.5	0.4	232.7	232.7	232.7	0.21	0.12	12-Feb-88
BG 87	3	232.9	232.3	0.6	232.6	232.6	232.6	0.30	0.17	12-Feb-88
BG 89	3	231.5	224.5	7.0	228.9	230.8	230.8	3.86	2.23	30-Nov-87
BG 90	2	231.1	230.9	0.2	231.0	231.0	231.0	0.14	0.10	15-Jun-87
BG 91	19	224.1	215.6	8.5	218.8	218.6	218.6	2.24	0.51	20-Jan-95
BG 92	19	212.0	198.1	13.9	209.0	209.4	209.4	3.01	0.69	20-Jan-95
BG 93	19	203.6	191.1	12.5	199.2	200.9	200.9	4.36	1.00	19-Jan-95
BG 94	20	193.1	189.6	3.5	191.2	191.0	191.9	1.20	0.27	20-Jan-95
BG 96	19	200.7	187.5	13.2	197.8	198.2	198.2	2.77	0.64	20-Jan-95
BG 98	1	224.5	224.5	0.0	224.5	224.5	224.5			7-Mar-88
BG 99	1	232.5	232.5	0.0	232.5	232.5	232.5			7-Mar-88
BG 100	1	224.8	224.8	0.0	224.8	224.8	224.8			29-Jan-88
BG 101	19	197.7	174.0	23.7	193.4	195.3	195.7	6.90	1.58	20-Jan-95
BG 103	18	202.7	159.3	43.4	197.7	199.5	199.5	9.68	2.28	20-Jan-95
BG 104	4	237.3	217.2	20.1	227.3	227.4	227.4	8.46	4.23	27-Nov-90
BG 107	21	238.4	217.7	20.7	234.6	235.4	236.2	4.15	0.91	19-Jan-95
BG 108	20	242.9	236.7	6.2	239.0	239.0	239.0	1.56	0.35	19-Jan-95
BG 109	20	248.1	237.9	10.2	240.8	240.4	240.4	2.40	0.54	19-Jan-95
BG 110	19	245.8	238.6	7.2	241.5	241.7	241.7	2.18	0.50	20-Jan-95
BG 113	1	217.1	217.1	0.0	217.1	217.1	217.2			29-Jan-88
BG 115	1	215.8	215.8	0.0	215.8	215.8	215.8			7-Mar-88
BG 119	1	215.4	215.4	0.0	215.4	215.4	215.4			7-Mar-88
BG 73	3	233.1	225.5	7.6	230.4	232.6	232.6	4.27	2.46	4-Dec-87

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
BG 124	1	231.8	231.8	0.0	231.8	231.8	231.8			7-Mar-88
BGO 1D	98	247.8	227.7	20.1	238.0	238.2	238.2	3.01	0.30	27-Jan-03
BGO 3D	38	238.3	233.3	5.1	235.6	235.4	235.4	1.12	0.07	27-Mar-96
BGO 3DR	51	262.1	223.4	38.7	231.0	230.6	230.6	4.77	0.67	16-Apr-03
BGO 4D	52	286.3	182.1	104.2	231.9	230.9	230.9	11.98	1.66	21-Apr-03
BGO 5D	89	285.1	225.8	59.3	230.4	230.4	230.4	6.29	0.67	22-Apr-03
BGO 6D	91	233.2	226.3	6.9	230.4	231.1	231.1	1.72	0.18	16-Apr-03
BGO 7D	88	238.5	171.8	66.7	230.7	231.7	231.7	6.93	0.74	16-Apr-03
BGO 8D	88	239.3	172.6	66.7	230.9	231.9	231.9	7.10	0.76	15-Apr-03
BGO 9D	91	233.6	215.1	18.5	228.5	230.2	230.2	4.56	0.48	14-Apr-03
BGO 10DR	77	233.9	156.6	77.3	229.2	230.6	230.6	8.72	0.99	14-Apr-03
BGO 11D	43	233.8	224.3	9.5	230.9	231.5	231.5	2.36	0.36	2-Oct-95
BGO 11DR	48	232.3	209.1	23.1	227.9	228.8	228.8	4.36	0.63	21-Apr-03
BGO 12CX	49	275.0	214.9	60.1	219.6	218.5	218.5	8.32	1.19	15-Apr-03
BGO 12D	43	234.1	229.3	4.8	231.4	231.4	231.4	1.30	0.20	26-Oct-95
BGO 13DR	81	233.5	220.5	13.0	229.4	230.0	231.0	2.59	0.29	15-Apr-03
BGO 14DR	73	233.1	218.7	14.4	229.1	230.0	230.0	2.91	0.34	16-Apr-03
BGO 15D	88	235.8	219.8	16.0	228.6	229.2	229.2	2.88	0.31	16-Apr-03
BGO 16D	81	233.6	227.4	6.2	230.4	230.6	230.6	1.60	0.18	3-Apr-02
BGO 17D	41	234.1	229.4	4.7	231.7	231.8	232.6	1.22	0.08	6-Dec-90
BGO 17DR	48	241.3	211.9	29.4	231.5	231.7	231.7	3.43	0.50	9-Dec-99
BGO 18D	72	234.4	228.1	6.3	231.6	231.8	231.8	1.51	0.10	29-Nov-01
BGO 20D	100	240.8	209.6	31.2	232.6	233.2	233.2	3.17	0.32	2-Apr-03
BGO 21D	90	245.1	227.6	17.5	233.8	234.3	234.3	2.45	0.26	2-Apr-03
BGO 22DR	26	271.1	218.6	52.5	237.8	237.2	237.2	7.74	1.52	24-Sep-96
BGO 22DX	38	235.7	218.1	17.6	232.5	233.1	233.1	2.89	0.47	2-Apr-03
BGO 23D	84	238.7	231.4	7.3	235.4	235.6	235.6	1.65	0.11	2-Apr-03
BGO 24D	88	240.0	223.4	16.6	236.2	236.4	236.4	2.15	0.23	2-Apr-03
BGO 26D	83	231.0	215.4	15.6	226.6	226.9	226.9	2.57	0.28	14-Apr-03
BGO 27D	84	231.0	221.6	9.4	226.5	226.9	226.9	2.26	0.25	21-Jan-03
BGO 28D	84	229.9	220.0	9.9	225.2	225.6	225.6	2.31	0.25	29-Jan-03
BGO 29D	71	229.5	220.4	9.2	225.0	225.5	225.5	2.34	0.28	21-Jan-03
BGO 30D	83	229.4	215.5	13.9	224.5	224.9	224.9	2.39	0.26	28-Jan-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
BGO 31D	86	230.4	214.4	16.0	225.2	225.3	225.3	2.67	0.29	29-Jan-03
BGO 32D	91	231.3	221.7	9.5	226.3	226.8	226.8	2.49	0.26	21-Jan-03
BGO 33D	109	234.9	220.3	14.6	229.1	228.8	228.8	2.46	0.24	21-Jan-03
BGO 34D	110	237.2	224.1	13.1	231.5	231.0	231.0	2.40	0.23	22-Jan-03
BGO 35D	115	244.8	227.4	17.4	233.4	233.0	233.0	2.45	0.23	22-Jan-03
BGO 36D	113	241.0	225.2	15.8	236.2	235.7	235.7	2.14	0.20	21-Jan-03
BGO 37D	113	243.4	231.0	12.4	238.3	238.3	238.3	2.10	0.20	22-Jan-03
BGO 38D	116	240.2	232.9	7.3	236.5	236.8	236.8	1.84	0.17	21-Jan-03
BGO 39D	110	238.7	214.9	23.8	235.0	235.3	235.3	2.54	0.24	21-Jan-03
BGO 44D	48	237.0	229.4	7.7	232.4	232.6	232.6	1.44	0.21	26-Jun-01
BGO 45D	67	230.9	211.2	19.7	226.3	227.1	227.1	3.05	0.37	23-Jan-03
BGO 49D	71	238.8	227.4	11.5	233.1	233.8	233.8	2.68	0.32	29-Jan-03
BGO 50D	67	228.6	219.5	9.1	223.9	224.3	224.3	2.25	0.28	3-Feb-03
BGO 51D	66	237.5	230.8	6.6	234.7	234.7	234.7	1.76	0.22	2-Apr-03
BGO 52D	63	270.1	220.6	49.5	233.2	232.8	232.8	5.88	0.74	2-Apr-03
BGX 1D	76	230.8	206.9	23.9	228.0	229.1	229.1	3.17	0.36	2-Apr-03
BGX 3D	69	220.5	201.9	18.6	213.8	214.5	214.5	3.04	0.37	1-Apr-03
BGX 4D	67	218.5	209.0	9.5	214.5	215.1	215.1	2.64	0.32	1-Apr-03
BGX 5D	69	212.4	202.9	9.5	207.8	208.2	208.2	2.58	0.31	1-Apr-03
BGX 6D	67	209.9	200.4	9.5	204.9	205.1	205.1	2.37	0.29	2-Apr-03
BGX 7D	61	209.1	199.3	9.8	204.6	204.8	204.8	2.29	0.29	2-Apr-03
BGX 8DR	64	208.5	200.7	7.8	204.5	204.7	204.9	2.02	0.25	2-Apr-03
BGX 9D	66	228.3	213.8	14.6	225.9	226.5	226.5	2.51	0.31	2-Apr-03
BGX 10D	69	231.1	218.6	12.5	225.0	225.3	225.3	1.92	0.23	2-Apr-03
BGX 11D	66	238.1	230.0	8.1	234.2	234.8	234.8	2.24	0.28	2-Apr-03
BGX 12D	70	243.6	232.5	11.1	237.7	237.7	237.7	2.62	0.31	2-Apr-03
BRD 1	51	172.7	164.7	8.0	167.8	168.1	168.1	2.14	0.30	3-Nov-00
BRD 2	52	177.4	156.2	21.3	169.3	169.3	169.3	3.65	0.51	2-Nov-00
BRD 3	26	174.1	167.0	7.1	170.4	169.9	169.9	1.72	0.13	2-Nov-00
BRD 4	48	171.8	138.7	33.1	166.2	167.0	167.8	4.59	0.66	2-Nov-00
BRD 5D	29	170.6	162.9	7.6	167.0	167.5	167.5	1.91	0.36	30-May-00
BRR 1D	22	220.4	212.7	7.7	216.9	217.1	217.1	2.27	0.48	8-May-02
BRR 2D	23	218.8	210.8	8.0	215.3	215.2	215.2	2.36	0.49	8-May-02

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
BRR 3D	27	218.6	210.5	8.1	215.0	214.9	214.9	2.21	0.42	30-May-02
BRR 4D	22	218.2	209.1	9.1	214.8	214.7	214.7	2.38	0.51	13-May-02
BRR 5D	26	217.8	209.7	8.2	214.6	214.5	214.5	2.10	0.41	13-May-02
BRR 6D	11	219.8	203.1	16.8	211.2	207.3	207.3	6.67	2.01	13-May-02
BRR 7D	7	218.7	213.2	5.5	216.6	217.3	217.3	2.33	0.88	15-May-02
BRR 8DR	7	216.6	209.6	7.0	213.8	214.4	214.4	2.15	0.81	14-May-02
BTP 6D	2	240.9	239.4	1.5	240.1	240.1	241.1	1.09	0.77	15-Dec-98
BTP 9D	2	222.0	220.4	1.6	221.2	221.2	221.2	1.12	0.79	15-Dec-98
CBR 1D	25	257.8	247.8	10.0	253.3	254.0	254.3	2.77	0.55	17-May-00
CBR 2D	26	257.5	247.4	10.1	252.8	253.3	253.3	2.72	0.53	17-May-00
CBR 3D	23	257.4	247.7	9.8	253.2	253.7	253.7	2.62	0.55	20-Mar-96
CBR 4D	9	257.5	241.8	15.7	246.5	244.2	244.2	6.06	2.02	8-May-97
CCB 1	46	232.7	211.0	21.7	225.9	225.4	225.4	3.53	0.23	15-Sep-00
CCB 2	59	232.6	211.7	20.9	222.9	224.6	224.6	5.29	0.69	20-Jun-03
CCB 3	51	233.7	213.4	20.3	225.1	225.6	225.6	4.68	0.65	19-Jun-03
CCB 4	56	234.6	212.7	21.9	225.5	226.9	226.9	5.70	0.76	20-Jun-03
CDB 1	50	219.6	206.2	13.5	212.8	212.5	212.5	3.54	0.50	16-Jun-03
CDB 2	46	220.0	209.1	10.9	213.7	213.8	213.8	3.25	0.22	15-Sep-00
CMP 8	60	206.2	195.8	10.4	202.7	203.0	203.0	2.03	0.26	21-May-03
CMP 10	41	224.4	191.1	33.3	218.8	219.9	220.0	6.62	1.03	19-Sep-94
CMP 10C	19	199.6	195.0	4.6	196.5	196.0	196.7	1.35	0.31	2-May-03
CMP 10D	20	225.0	209.1	15.9	218.3	217.1	217.1	3.02	0.20	2-May-03
CMP 11	39	216.1	208.5	7.6	212.1	212.5	212.5	2.27	0.36	20-Sep-94
CMP 11D	24	224.7	214.8	9.9	218.4	216.6	216.6	3.34	0.22	22-May-03
CMP 12	42	215.5	203.9	11.6	210.2	210.5	210.5	2.77	0.43	15-May-97
CMP 13	44	211.0	205.5	5.5	207.9	207.7	207.7	1.63	0.25	15-May-97
CMP 14C	35	217.1	205.7	11.3	212.4	212.2	212.2	2.92	0.49	20-Sep-94
CMP 14CR	9	205.0	202.9	2.0	203.7	203.8	204.5	0.71	0.24	1-Apr-03
CMP 14D	16	217.7	211.2	6.5	212.8	211.4	211.4	2.54	0.63	1-Apr-03
CMP 14DU	13	211.1	208.8	2.2	210.2	210.2	210.2	0.81	0.22	1-Apr-03
CMP 15C	36	245.3	215.6	29.7	234.3	235.2	235.2	6.88	0.45	5-May-03
CMP 30D	25	225.5	214.2	11.3	218.0	215.3	215.3	3.87	0.77	7-May-03
CMP 31C	6	211.82	207.01	4.81	209.8	210.8	211.0	2.22	0.15	9-Jul-99

APPENDIX A

WSRC-TR-2003-00250, REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
CMP 32C	23	196.4	192.7	3.7	194.2	194.1	194.1	0.93	0.19	7-May-03
CMP 32D	6	221.3	220.9	0.4	221.0	221.0	221.0	0.14	0.01	19-Mar-02
CMP 36D	13	206.0	202.2	3.8	203.8	203.6	203.6	0.97	0.27	22-May-03
CMP 37D	11	202.5	200.1	2.3	201.5	201.4	201.7	0.73	0.22	21-May-03
CMP 38D	12	201.7	199.6	2.1	200.7	200.8	200.8	0.68	0.20	21-May-03
CMP 39D	11	199.4	196.6	2.8	198.6	198.8	199.1	0.85	0.26	21-May-03
CMP 40D	10	201.4	197.4	4.0	198.8	198.8	199.0	1.10	0.35	21-May-03
CMP 41D	11	197.1	195.2	1.9	196.5	196.7	196.7	0.59	0.18	19-May-03
CMP 42D	14	196.8	194.7	2.1	196.0	196.2	196.2	0.60	0.16	21-May-03
CMP 43D	11	194.1	192.6	1.4	193.6	193.9	194.0	0.49	0.15	19-May-03
CMP 44D	14	209.0	206.4	2.7	207.6	207.8	207.8	0.76	0.05	20-May-03
CMP 45D	14	208.3	205.9	2.4	206.8	206.9	207.0	0.68	0.18	20-May-03
CMP 46D	16	208.4	202.9	5.4	206.0	206.4	206.4	1.31	0.33	21-May-03
CMP 47D	16	209.5	202.3	7.2	206.4	206.5	206.5	1.44	0.36	20-May-03
CMP 48D	16	207.4	204.9	2.5	205.9	206.0	206.0	0.64	0.16	20-May-03
CMP 49D	17	219.9	217.6	2.3	218.7	218.7	218.7	0.65	0.16	22-May-03
CMP 50D	16	210.3	205.2	5.1	206.4	206.3	206.3	1.14	0.08	20-May-03
CMP 52BU	11	194.9	190.3	4.6	193.7	193.9	194.2	1.21	0.37	20-May-03
CMP 52C	11	208.1	206.3	1.8	207.0	206.9	206.9	0.49	0.15	20-May-03
CMP 53C	4	203.7	203.2	0.6	203.4	203.3	203.3	0.24	0.12	18-Jul-02
CMP 54C	15	194.5	192.9	1.6	193.7	193.9	194.4	0.40	0.10	19-May-03
CMP 55C	11	196.7	194.3	2.4	195.6	195.5	196.3	0.65	0.20	19-May-03
CRP 1	59	214.7	201.2	13.5	208.0	208.0	208.0	2.90	0.38	10-Jun-03
CRP 2	56	212.1	202.1	10.0	207.0	207.1	207.6	2.21	0.29	16-Jun-03
CRP 3	30	211.9	199.6	12.3	207.4	208.0	208.0	2.77	0.19	10-Jun-03
CRP 3D	47	208.6	197.1	11.6	203.8	203.3	203.3	2.88	0.42	9-Jun-03
CRP 4	51	213.1	189.5	23.7	207.1	207.2	207.2	3.80	0.53	17-Jun-03
CRP 5D	26	214.0	196.9	17.1	208.6	209.9	209.9	4.37	0.86	6-Jun-03
CRP 6DR	7	210.5	201.4	9.1	204.3	203.8	203.8	2.94	1.11	17-Jun-03
CRP 7D	19	211.3	200.6	10.7	204.7	205.1	205.1	2.80	0.64	16-Jun-03
CRP 8D	16	211.2	175.2	36.0	203.1	204.4	204.4	7.99	2.00	17-Jun-03
CRP 9D	17	209.3	182.7	26.6	203.4	203.4	203.4	5.98	1.45	19-Jun-03
CRP 10D	30	208.5	199.0	9.5	202.1	202.1	202.1	1.89	0.35	9-Jun-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
CRP 11D	33	211.0	198.8	12.2	202.9	202.2	202.2	3.00	0.21	10-Jun-03
CRP 16DU	20	205.9	199.7	6.2	202.0	202.1	202.1	1.74	0.39	9-Jun-03
CRP 17DU	24	202.9	181.3	21.6	199.8	201.2	201.2	5.74	1.17	11-Jun-03
CRP 18D	7	200.2	198.6	1.7	199.3	198.8	198.8	0.79	0.30	23-Jun-03
CRP 19D	4	197.1	193.4	3.7	195.4	195.6	195.8	1.64	0.82	19-Jun-03
CRP 21	3	165.2	163.3	1.9	164.2	164.1	165.0	0.96	0.55	18-Jun-03
CRP 22CU	4	182.6	180.4	2.2	181.0	180.5	180.5	1.08	0.54	18-Jun-03
CRP 23DU	3	201.0	198.1	2.8	199.1	198.1	198.3	1.64	0.95	12-Jun-03
CRP 24DU	3	201.0	200.3	0.7	200.5	200.3	201.3	0.41	0.24	13-Jun-03
CRP 25DU	3	201.0	199.9	1.1	200.4	200.3	200.9	0.57	0.33	13-Jun-03
CRP 26DU	3	201.1	199.5	1.6	200.0	199.5	200.3	0.91	0.52	13-Jun-03
CRP 27DU	3	201.2	200.3	0.8	200.6	200.3	200.8	0.48	0.28	11-Jun-03
CRP 28DU	1	201.2	201.2	0.0	201.2	201.2	201.2			12-Jun-03
CRP 40A	4	197.6	194.7	2.9	195.9	195.6	196.0	1.35	0.67	24-Jun-03
CRP 40B	3	197.3	194.5	2.8	195.8	195.6	196.3	1.41	0.81	24-Jun-03
CRP 41A	4	192.3	190.4	1.9	191.2	191.0	191.4	0.89	0.44	23-Jun-03
CRP 41B	3	189.9	187.9	2.0	189.0	189.0	189.4	1.00	0.58	23-Jun-03
CRP 42A	3	185.0	184.6	0.4	184.8	184.8	185.0	0.20	0.11	23-Jun-03
CRP 42B	4	185.1	184.0	1.1	184.6	184.7	185.1	0.57	0.28	23-Jun-03
CRP 43A	5	176.8	175.4	1.5	176.2	176.2	176.3	0.56	0.25	24-Jun-03
CRP 43B	5	179.7	179.0	0.8	179.3	179.2	179.8	0.32	0.14	24-Jun-03
CRP 44A	4	165.3	162.3	3.0	163.7	163.7	163.7	1.65	0.83	23-Jun-03
CRP 44B	5	165.0	162.2	2.7	163.8	164.5	164.8	1.39	0.62	25-Jun-03
CRP 45A	6	196.9	193.1	3.8	195.5	195.7	195.9	1.55	0.63	24-Jun-03
CRP 45B	5	197.2	193.8	3.4	196.0	196.7	197.3	1.46	0.65	24-Jun-03
CRP 46A	2	191.1	189.5	1.6	190.3	190.3	190.7	1.14	0.81	25-Jun-03
CRP 46B	2	187.9	187.8	0.1	187.8	187.8	188.3	0.11	0.08	25-Jun-03
CRP 47A	3	183.3	182.2	1.2	182.6	182.4	182.7	0.61	0.35	23-Jun-03
CRP 47B	2	177.9	177.7	0.2	177.8	177.8	177.9	0.15	0.11	23-Jun-03
CRP 48A	4	175.8	175.1	0.8	175.5	175.5	176.0	0.31	0.15	24-Jun-03
CRP 48B	2	176.5	175.9	0.6	176.2	176.2	176.8	0.42	0.30	23-Jun-03
CRP 49A	6	164.2	162.6	1.6	163.7	163.8	164.0	0.67	0.27	25-Jun-03
CRP 49B	5	164.4	162.0	2.4	163.2	163.4	163.8	1.11	0.49	25-Jun-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
CRP 50A	3	163.5	161.9	1.7	162.9	163.4	163.7	0.91	0.53	24-Jun-03
CRP 50B	3	163.6	162.3	1.3	163.1	163.5	163.9	0.71	0.41	24-Jun-03
CRP 51A	4	162.9	160.8	2.1	161.7	161.5	161.8	0.87	0.43	25-Jun-03
CRP 51B	3	161.9	160.5	1.3	161.4	161.7	162.1	0.73	0.42	25-Jun-03
CRP 52A	6	162.4	159.1	3.3	161.7	162.3	162.5	1.30	0.53	26-Jun-03
CRP 52B	3	162.7	161.9	0.8	162.3	162.5	162.9	0.41	0.24	25-Jun-03
CSA 1	42	283.3	238.7	44.7	245.0	245.2	245.2	6.92	1.07	21-Aug-98
CSA 2	42	252.7	226.6	26.1	244.2	245.9	245.9	4.50	0.69	21-Aug-98
CSA 3	42	251.1	225.6	25.6	243.5	245.0	245.0	4.39	0.68	21-Aug-98
CSA 4	42	250.7	238.5	12.2	243.6	244.8	244.8	3.41	0.53	24-Aug-98
CSB 1A	48	249.5	208.7	40.8	213.4	212.5	212.5	5.91	0.85	8-Jun-99
CSB 2A	43	216.2	206.5	9.7	210.7	210.6	210.6	2.67	0.41	8-Jun-99
CSB 3A	47	215.7	206.1	9.6	210.4	210.2	210.2	2.65	0.39	8-Jun-99
CSB 4A	49	215.6	206.0	9.6	210.4	210.4	210.4	2.72	0.39	8-Jun-99
CSB 5A	49	215.5	206.1	9.4	210.4	210.1	210.1	2.62	0.37	8-Jun-99
CSB 6A	46	216.4	206.9	9.5	211.1	211.1	211.1	2.59	0.38	8-Jun-99
CSB 7D	14	214.9	204.4	10.5	209.6	209.5	209.5	3.60	0.96	11-Jun-03
CSB 8D	9	210.7	202.3	8.5	205.6	205.3	206.3	3.15	1.05	10-Jun-03
CSB 9D	9	210.6	201.5	9.1	205.4	205.2	205.2	3.25	1.08	10-Jun-03
CSB 12D	8	160.9	158.8	2.1	159.3	159.2	160.1	0.68	0.24	13-Jun-03
CSD 1D	27	248.3	241.1	7.2	244.8	246.1	246.1	2.54	0.49	22-Jun-00
CSD 2D	13	250.1	246.2	3.9	248.9	249.0	249.0	1.00	0.06	19-Apr-95
CSD 4D	22	247.5	240.0	7.6	243.9	245.4	245.4	2.94	0.63	21-Jun-00
CSD 8D	23	247.0	239.7	7.3	243.2	244.4	244.4	2.66	0.55	3-Mar-99
CSD 9D	22	246.7	239.4	7.3	243.1	244.2	244.2	2.83	0.60	21-Jun-00
CSD 10D	22	246.6	239.3	7.3	243.0	244.3	244.3	2.83	0.60	19-Jun-00
CSD 11D	22	246.6	238.9	7.6	242.8	244.4	244.4	3.00	0.64	20-Jun-00
CSD 12D	22	247.2	239.7	7.5	243.4	244.9	244.9	2.87	0.61	20-Jun-00
CSD 13D	23	246.0	238.1	7.9	242.3	243.7	243.7	2.97	0.62	20-Jun-00
CSF 1D	3	243.7	243.2	0.5	243.4	243.2	243.2	0.29	0.17	29-Aug-96
CSF 2D	2	251.3	250.6	0.7	251.0	251.0	251.0	0.48	0.34	29-Aug-96
CSL 21D	3	245.6	242.3	3.3	243.8	243.6	244.1	1.66	0.96	1-Feb-00
CSL 22D	3	245.4	241.8	3.6	243.4	243.0	243.5	1.85	1.07	1-Feb-00

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
CSL 23D	5	245.9	241.9	4.0	244.4	245.2	246.0	1.79	0.80	1-Feb-00
CSL 24D	6	246.2	242.3	3.9	244.9	245.5	246.4	1.61	0.66	1-Feb-00
CSL 25D	5	246.3	242.2	4.1	244.1	243.5	243.5	2.07	0.92	2-Feb-00
CSL 26D	6	246.5	242.5	4.0	244.4	243.7	243.8	1.67	0.68	1-Feb-00
CSL 27D	4	245.9	241.8	4.1	244.1	244.4	244.4	2.09	1.04	1-Feb-00
CSO 1	48	262.0	241.5	20.5	252.0	252.3	252.3	4.62	0.67	5-Aug-99
CSR 1	45	265.1	245.9	19.2	257.1	257.9	257.9	3.93	0.59	25-Apr-02
CSR 2	39	284.9	246.9	38.0	265.3	262.3	262.3	8.24	1.32	15-Dec-97
CSR 3	43	263.7	247.0	16.7	255.7	256.5	256.5	4.08	0.62	1-Jun-98
CSR 4	41	263.5	245.4	18.1	257.5	258.2	258.2	3.74	0.58	1-Jun-98
CSR 5D	7	260.5	250.6	9.9	257.6	258.0	258.4	3.55	1.34	1-Apr-02
CSR 8DU	4	259.0	251.4	7.6	257.0	258.8	259.5	3.72	1.86	1-Apr-02
CSR 9DU	3	255.4	248.5	7.0	252.9	254.7	254.7	3.83	2.21	1-Apr-02
CSR 10DU	3	255.7	244.9	10.9	252.0	255.4	256.4	6.19	3.57	2-Apr-02
DA 11C	1	103.3	103.3	0.0	103.3	103.3	104.0			5-Jun-03
DA 12C	1	105.6	105.6	0.0	105.6	105.6	106.6			5-Jun-03
DB 6C	1	108.0	108.0	0.0	108.0	108.0	109.0			5-Jun-03
DB 10C	1	102.5	102.5	0.0	102.5	102.5	103.4			5-Jun-03
DB 15C	1	107.4	107.4	0.0	107.4	107.4	108.4			5-Jun-03
DBP 1	54	126.5	111.5	15.0	119.4	119.2	119.2	2.98	0.41	11-Jun-03
DBP 2	59	120.4	94.5	25.9	116.3	117.1	117.4	3.69	0.48	11-Jun-03
DBP 3	58	124.4	111.4	13.0	120.4	121.0	121.4	2.76	0.36	11-Jun-03
DBP 4	52	124.2	110.8	13.4	119.2	120.0	120.6	2.80	0.39	11-Jun-03
DBP 5	23	122.0	114.0	8.0	117.8	117.9	118.0	2.19	0.46	11-Jun-03
DCB 1A	45	117.3	113.9	3.3	115.4	115.1	115.1	0.85	0.13	2-Jun-03
DCB 2A	46	127.1	122.3	4.8	124.8	124.6	124.6	1.21	0.18	2-Jun-03
DCB 3A	44	122.7	118.7	4.0	120.6	120.5	120.5	1.09	0.17	2-Jun-03
DCB 4A	49	120.7	116.9	3.8	119.0	119.1	119.1	0.84	0.12	2-Jun-03
DCB 5A	48	120.4	117.1	3.2	118.7	118.8	119.1	0.80	0.12	2-Jun-03
DCB 6	36	119.9	115.3	4.6	116.8	116.6	116.6	0.88	0.15	2-Jun-03
DCB 7	35	119.4	116.2	3.3	118.0	118.1	118.1	0.85	0.14	2-Jun-03
DCB 8	37	129.3	123.9	5.4	126.4	126.5	126.5	1.48	0.24	2-Jun-03
DCB 9	33	117.1	106.2	10.8	114.7	114.9	114.9	1.79	0.31	3-Jun-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
DCB 10	39	120.2	110.8	9.4	116.3	116.4	116.4	2.41	0.39	9-Jun-03
DCB 11	36	127.4	120.1	7.3	122.2	121.8	121.8	1.56	0.26	2-Jun-03
DCB 12	41	111.2	105.9	5.3	109.4	109.4	109.4	1.13	0.18	26-Jun-03
DCB 13	32	124.2	110.4	13.9	117.3	118.1	118.1	4.35	0.77	25-Mar-99
DCB 14	9	122.3	109.1	13.2	111.6	109.9	109.9	4.22	1.41	7-Dec-90
DCB 15	31	116.6	105.4	11.2	112.0	112.9	112.9	2.90	0.52	3-Jun-03
DCB 16	30	116.1	110.0	6.1	112.0	111.9	111.9	1.29	0.24	8-Apr-99
DCB 17A	8	119.1	117.7	1.4	118.3	118.3	118.3	0.42	0.15	3-Jun-03
DCB 18A	15	119.2	113.6	5.6	116.8	117.3	117.3	1.80	0.46	2-Jun-03
DCB 19A	8	120.4	115.8	4.6	118.0	117.8	117.8	1.55	0.55	2-Jun-03
DCB 20A	11	120.1	115.3	4.8	118.1	118.7	118.7	1.48	0.45	2-Jun-03
DCB 21A	8	121.5	117.3	4.2	118.7	118.5	118.5	1.29	0.46	2-Jun-03
DCB 21B	8	115.7	114.0	1.8	114.8	114.7	115.7	0.57	0.20	2-Jun-03
DCB 22A	15	115.5	110.8	4.7	113.6	114.2	114.2	1.55	0.40	2-Jun-03
DCB 23A	14	114.6	112.3	2.3	113.3	113.4	113.4	0.70	0.19	17-Jun-03
DCB 24A	8	118.0	117.0	1.0	117.4	117.3	117.3	0.33	0.12	2-Jun-03
DCB 26AR	7	119.5	115.3	4.2	117.2	117.2	117.7	1.57	0.59	11-Jun-03
DCB 27	8	105.1	102.7	2.4	104.5	104.7	105.0	0.77	0.27	2-Jun-03
DCB 28	8	98.2	90.8	7.3	95.4	96.2	96.6	2.45	0.87	11-Jun-03
DCB 29R	8	99.9	93.5	6.3	96.5	96.7	97.3	2.31	0.82	12-Jun-03
DCB 30	13	105.3	98.7	6.5	101.3	101.8	101.9	1.82	0.50	3-Jun-03
DCB 32A	6	127.0	120.6	6.4	122.8	122.5	122.6	2.25	0.92	2-Jun-03
DCB 34A	8	119.9	115.7	4.2	118.0	118.4	119.0	1.53	0.54	12-Jun-03
DCB 36A	7	116.5	112.5	3.9	114.9	115.5	115.7	1.57	0.59	2-Jun-03
DCB 37A	7	119.1	115.2	3.9	117.0	117.2	117.8	1.48	0.56	12-Jun-03
DCB 39A	8	119.0	116.8	2.2	117.9	117.9	118.2	0.81	0.29	12-Jun-03
DCB 40A	8	118.8	114.8	4.0	116.7	116.6	116.7	1.44	0.51	12-Jun-03
DCB 43A	5	119.6	118.6	0.9	119.0	118.9	119.4	0.34	0.15	3-Jun-03
DCB 44A	5	126.3	123.9	2.4	124.6	124.1	124.2	0.99	0.44	3-Jun-03
DCB 45A	7	125.7	123.3	2.4	124.3	123.9	123.9	1.04	0.39	12-Jun-03
DCB 49	1	118.7	118.7	0.0	118.7	118.7	118.7			2-Jun-03
DCB 50	1	118.5	118.5	0.0	118.5	118.5	118.5			2-Jun-03
DCB 51A	6	144.4	135.7	8.8	139.5	140.2	140.4	3.33	1.36	3-Jun-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
DCB 57A	5	119.3	112.6	6.7	115.0	115.1	115.9	2.74	1.23	2-Jun-03
DCB 59A	3	124.4	118.6	5.8	120.7	118.9	119.4	3.27	1.89	2-Jun-03
DCB 61	4	130.9	119.3	11.6	124.1	123.0	123.5	4.90	2.45	3-Jun-03
DCB 63	3	136.5	134.5	2.0	135.2	134.7	134.9	1.11	0.64	3-Jun-03
DCB 64	4	135.3	133.3	2.0	133.9	133.5	133.9	0.95	0.48	3-Jun-03
DCB 65A	3	105.0	102.8	2.2	103.6	102.9	102.9	1.23	0.71	13-Jun-03
DCB 70A	2	113.4	112.1	1.3	112.8	112.8	112.8	0.91	0.65	5-Jun-03
DCB 71A	2	112.7	111.6	1.1	112.1	112.1	112.1	0.78	0.55	5-Jun-03
DOB 1	65	146.8	137.3	9.5	143.0	143.9	143.9	2.56	0.32	14-Dec-00
DOB 2	64	148.5	136.5	12.0	143.1	144.1	144.1	2.80	0.35	14-Dec-00
DOB 3	51	147.4	137.3	10.1	142.9	143.7	143.7	2.94	0.41	15-Dec-00
DOB 4	49	147.5	137.6	9.9	143.0	143.3	143.6	2.80	0.40	15-Dec-00
DOB 5	1	144.7	144.7	0.0	144.7	144.7	144.7			8-Apr-99
DOB 6	1	144.3	144.3	0.0	144.3	144.3	144.3			8-Apr-99
DOB 7	18	145.7	139.4	6.3	143.5	144.0	144.0	1.77	0.42	2-Jun-99
DOB 8	18	147.3	139.9	7.4	144.1	144.5	144.5	1.86	0.44	2-Jun-99
DOB 9	14	147.1	136.4	10.7	141.5	141.6	141.6	3.58	0.96	17-Jun-03
DOB 10	18	145.7	139.7	6.0	143.6	144.0	144.0	1.62	0.38	2-Jun-99
DOB 12	20	145.9	139.7	6.2	143.4	143.8	144.2	1.58	0.35	3-Jun-99
DOB 14	4	144.0	142.5	1.6	143.1	143.0	143.6	0.75	0.38	8-Apr-99
DOB 15A	10	143.9	136.4	7.5	139.5	138.8	139.7	2.72	0.86	16-Jun-03
DOB 19A	11	142.1	135.8	6.3	139.0	138.7	139.7	2.21	0.67	16-Jun-03
DOB 20A	10	142.4	134.7	7.7	138.4	138.4	139.3	2.54	0.80	17-Jun-03
DOB 21A	10	142.3	134.8	7.5	138.2	137.5	138.3	2.51	0.79	17-Jun-03
DOB 22A	10	141.9	119.6	22.3	135.4	136.9	137.9	6.74	2.13	18-Jun-03
DWP 1	6	96.0	90.3	5.7	92.7	91.9	91.9	2.67	1.09	17-Jun-03
DWP 2	4	95.9	89.4	6.5	92.7	92.8	93.0	2.75	1.38	6-Jun-03
DWP 3	5	95.7	88.5	7.2	92.5	92.2	92.2	3.18	1.42	21-Jun-03
DWP 4	3	97.0	93.6	3.4	95.3	95.5	95.6	1.71	0.98	4-Jun-03
DWP 5	5	99.9	98.6	1.4	99.2	99.2	99.6	0.61	0.27	5-Jun-03
DWP 6	4	92.7	90.8	1.9	91.6	91.4	91.4	0.81	0.40	5-Jun-03
DWP 7	5	96.9	90.4	6.5	94.6	95.4	95.6	2.73	1.22	20-Jun-03
DWP 8	8	96.2	89.5	6.7	92.8	92.7	92.7	2.56	0.90	20-Jun-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
DWP 9	5	94.6	86.8	7.8	91.0	90.8	90.8	3.31	1.48	20-Jun-03
DWP 10	4	91.8	81.8	10.1	86.8	86.8	87.1	5.63	2.81	21-Jun-03
DWP 11	4	91.8	81.5	10.3	86.5	86.3	86.4	5.62	2.81	21-Jun-03
F 2	3	220.1	215.6	4.5	218.4	219.4	219.6	2.42	1.40	24-Aug-89
F 9	5	218.8	207.7	11.1	211.6	209.3	209.3	4.81	0.33	14-Feb-90
F 10	6	273.6	264.6	9.0	270.1	270.4	270.4	3.50	0.21	24-Aug-89
F 18A	12	213.6	201.9	11.7	203.8	202.9	202.9	3.20	0.92	14-Feb-90
FAB 1	14	229.1	225.4	3.8	228.1	228.4	228.4	1.07	0.29	23-Oct-00
FAB 2	16	230.0	226.1	3.9	228.9	229.1	229.1	1.04	0.26	20-Oct-00
FAB 3	16	229.7	225.8	3.9	228.5	228.6	228.6	1.18	0.30	20-Oct-00
FAB 4	14	229.3	225.5	3.8	228.3	228.5	228.5	1.00	0.27	20-Oct-00
FAC 1	8	239.4	229.0	10.4	234.1	235.0	235.0	4.11	1.45	10-Dec-86
FAC 2	8	240.0	229.7	10.3	234.8	235.9	235.9	4.11	1.45	9-Dec-86
FAC 3	41	240.9	225.0	15.9	230.4	230.0	230.0	3.34	0.52	11-Jul-95
FAC 4	42	239.0	226.4	12.6	229.4	229.0	229.0	2.58	0.40	12-Jul-95
FAC 5	29	246.7	220.9	25.7	225.7	225.5	225.5	5.10	0.95	12-Jul-95
FAC 5P	5	230.7	228.7	1.9	229.7	229.6	229.6	0.86	0.38	21-Apr-95
FAC 6	26	232.1	216.2	15.9	220.8	220.7	220.7	4.10	0.80	21-Apr-95
FAC 7	29	230.2	216.1	14.1	223.2	223.2	223.2	5.57	1.03	12-Jul-95
FAC 8	29	232.0	221.6	10.5	227.2	229.1	229.1	3.91	0.73	12-Jul-95
FAC 10C	5	218.1	216.5	1.6	217.4	217.5	218.2	0.63	0.28	11-Jul-95
FAC 11C	5	218.2	216.7	1.5	217.5	217.6	218.2	0.63	0.28	11-Jul-95
FAC 12C	5	218.3	216.8	1.5	217.5	217.6	218.6	0.63	0.28	11-Jul-95
FAL 1	45	221.7	215.0	6.7	218.5	218.4	218.4	1.73	0.26	28-Aug-01
FAL 2	42	220.1	214.0	6.1	217.2	217.3	217.3	1.66	0.26	31-Oct-00
FBP 5D	16	208.0	199.7	8.3	204.9	204.6	204.6	1.98	0.50	16-May-02
FBP 6D	20	199.0	186.3	12.7	194.3	194.0	194.0	2.72	0.19	20-Jun-02
FBP 7D	7	194.7	187.2	7.6	193.1	194.2	194.2	2.69	1.02	30-May-02
FBP 9D	14	204.1	192.1	12.0	199.7	199.6	199.8	3.28	0.88	15-May-02
FBP 10D	10	220.1	196.4	23.7	202.2	201.1	201.1	6.53	2.07	30-May-02
FBP 11D	8	203.4	198.6	4.8	202.5	203.1	203.1	1.63	0.58	30-May-02
FBP 12D	13	211.2	202.2	9.0	207.9	207.4	208.0	2.29	0.64	15-May-02
FBP 13D	18	199.7	184.5	15.2	194.2	194.7	194.9	3.81	0.90	29-May-02

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
FBP 43DU	3	226.5	225.3	1.1	226.0	226.2	226.2	0.58	0.33	22-Apr-98
FBP 44D	2	167.6	167.5	0.1	167.5	167.5	167.5	0.04	0.03	22-Apr-98
FBP 45D	2	163.7	163.1	0.6	163.4	163.4	163.4	0.46	0.33	22-Apr-98
FBP 46D	2	166.4	166.1	0.2	166.2	166.2	166.2	0.16	0.12	22-Apr-98
FBP 47D	2	170.4	170.4	0.0	170.4	170.4	170.4	0.00	0.00	22-Apr-98
FBP 48D	2	172.7	172.5	0.3	172.6	172.6	172.6	0.18	0.13	22-Apr-98
FC 1D	1	223.6	223.6	0.0	223.6	223.6	223.8			16-May-88
FC 3F	1	206.3	206.3	0.0	206.3	206.3	206.3			16-May-88
FC 4D	1	151.0	151.0	0.0	151.0	151.0	151.0			16-May-88
FC 4E	1	185.2	185.2	0.0	185.2	185.2	185.6			16-May-88
FCA 19D	31	220.1	214.0	6.1	217.1	217.1	217.1	1.88	0.34	31-Oct-00
FCB 1	21	241.3	227.2	14.1	233.0	231.3	231.3	4.15	0.91	1-Jun-88
FCB 2	56	240.9	212.4	28.5	228.2	229.5	229.5	6.50	0.87	10-Apr-03
FCB 3	40	235.3	221.0	14.4	225.4	224.8	224.8	3.45	0.55	2-Jan-96
FCB 4	48	239.0	210.9	28.1	227.4	228.6	228.6	6.77	0.98	31-Oct-00
FCB 5	32	232.0	225.1	6.9	228.7	228.7	228.7	1.76	0.31	23-Oct-00
FCB 6	26	231.7	227.0	4.7	229.1	228.8	228.8	1.40	0.27	22-Feb-95
FCB 7	6	237.9	231.0	6.8	235.2	236.1	236.1	2.47	0.16	8-Jun-92
FET 1D	33	226.4	221.1	5.3	223.6	223.7	223.7	1.52	0.26	23-Oct-00
FET 2D	33	225.3	220.1	5.2	222.3	222.4	222.4	1.56	0.27	23-Oct-00
FET 3D	30	225.2	220.5	4.7	222.6	222.7	222.7	1.57	0.29	10-Sep-98
FET 4D	35	225.8	220.4	5.4	222.9	222.9	222.9	1.59	0.27	23-Oct-00
FNB 1	43	216.0	207.8	8.2	211.3	211.1	211.5	2.25	0.34	24-Apr-97
FNB 2	49	212.3	185.3	27.0	205.9	206.7	206.7	5.63	0.80	16-Jan-03
FNB 3	50	213.5	184.9	28.6	207.8	208.7	208.7	6.32	0.89	14-Jan-03
FNB 4	44	218.3	188.9	29.5	213.1	213.5	213.9	4.52	0.68	6-Sep-00
FNB 5	13	208.0	201.6	6.4	205.6	206.5	206.8	2.02	0.56	14-Jan-03
FNB 6	4	209.2	208.3	0.9	208.7	208.7	208.7	0.43	0.21	13-May-97
FNB 7	4	204.6	203.6	1.0	203.9	203.8	203.9	0.44	0.22	13-May-97
FNB 8	5	203.3	202.6	0.7	202.9	202.6	202.6	0.33	0.15	13-May-97
FNB 10	5	198.2	192.7	5.4	196.2	196.1	196.1	2.15	0.15	16-Jan-03
FNB 11	3	200.7	198.8	2.0	200.0	200.5	201.5	1.09	0.63	26-Sep-02
FNB 12	4	192.0	190.5	1.4	191.3	191.3	191.3	0.72	0.36	15-Jan-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
FNB 13	4	189.5	188.4	1.2	189.0	189.0	189.0	0.62	0.31	15-Jan-03
FNB 14	4	191.1	183.1	7.9	188.7	190.3	190.3	3.75	1.88	15-Jan-03
FOB 1D	6	207.4	202.7	4.6	204.7	204.0	204.8	1.97	0.81	17-Sep-98
FOB 2D	6	208.5	194.3	14.2	203.7	204.1	205.0	5.01	2.04	21-Sep-98
FOB 3D	6	209.0	195.4	13.6	204.2	204.2	204.3	4.84	1.97	21-Sep-98
FOB 7D	5	217.3	211.4	5.9	213.2	211.9	211.9	2.46	0.17	17-Sep-98
FOB 8D	6	216.3	210.2	6.2	212.8	211.8	211.8	2.86	1.17	21-Sep-98
FOB 9D	6	219.0	212.8	6.2	215.3	214.2	214.4	2.84	1.16	21-Sep-98
FOB 10D	6	219.2	213.2	5.9	215.8	215.2	215.2	2.72	1.11	21-Sep-98
FOB 11D	7	220.3	215.2	5.1	217.8	219.1	219.1	2.40	0.91	18-Dec-98
FRB 1	9	230.9	214.7	16.1	224.4	225.5	225.5	4.74	1.58	16-Jan-03
FRB 2	14	226.8	214.8	12.0	222.1	221.9	221.9	3.39	0.91	21-Jan-03
FRB 3	13	226.8	217.7	9.1	222.4	222.1	222.1	2.81	0.78	20-Jan-03
FRB 4	11	227.1	220.3	6.8	223.4	223.1	223.1	2.04	0.61	16-Jul-02
FSB 0PD	12	209.8	199.8	10.0	203.5	201.8	201.8	3.58	1.03	1-Apr-03
FSB 25PD	11	201.5	199.4	2.1	200.6	200.7	200.7	0.69	0.21	1-Apr-03
FSB 50PD	24	210.9	199.9	11.0	204.1	202.9	202.9	3.16	0.65	1-Apr-03
FSB 76	114	222.3	210.0	12.4	217.7	217.8	217.8	2.30	0.15	2-Apr-03
FSB 77	128	219.7	190.2	29.5	212.2	212.3	212.3	2.88	0.25	14-Apr-03
FSB 78	136	215.6	194.1	21.5	208.0	208.6	208.6	2.80	0.24	15-Apr-03
FSB 79	129	204.4	174.0	30.4	199.6	201.9	201.9	5.33	0.47	14-Apr-03
FSB 87D	61	215.8	208.3	7.5	212.3	213.0	213.0	2.09	0.14	5-Apr-03
FSB 88D	111	219.8	211.4	8.4	216.0	216.0	216.0	1.86	0.18	3-Apr-03
FSB 89D	107	219.2	210.2	9.0	215.6	215.8	215.8	1.85	0.18	14-Apr-03
FSB 90D	63	235.1	210.2	24.9	215.0	215.4	215.4	3.51	0.44	3-Apr-03
FSB 91D	107	247.4	183.1	64.3	213.6	213.8	213.8	4.84	0.47	15-Apr-03
FSB 92D	105	215.7	205.5	10.2	211.6	211.8	211.8	2.03	0.20	16-Apr-03
FSB 93D	116	217.0	177.1	39.9	209.6	210.2	210.2	4.88	0.45	17-Apr-03
FSB 94DR	97	213.7	203.4	10.3	209.1	209.5	210.2	2.58	0.26	15-Apr-03
FSB 95DR	95	256.5	204.3	52.2	209.6	209.6	209.9	5.42	0.56	9-Apr-03
FSB 97D	112	214.3	205.8	8.4	210.1	210.2	210.2	1.95	0.18	10-Apr-03
FSB 98D	117	218.8	150.4	68.4	210.9	211.4	211.4	6.07	0.56	22-Apr-03
FSB 99D	113	216.8	208.5	8.3	212.3	212.6	212.6	2.03	0.19	4-Apr-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
FSB100PD	11	201.5	199.3	2.2	200.7	200.7	200.7	0.76	0.23	1-Apr-03
FSB104D	104	209.5	191.7	17.8	202.5	203.9	203.9	4.04	0.40	16-Apr-03
FSB105DR	91	214.6	205.8	8.9	210.2	210.4	210.6	2.28	0.24	7-Apr-03
FSB106D	43	214.9	201.4	13.5	207.1	206.9	206.9	1.83	0.28	28-Apr-00
FSB107D	110	217.5	203.4	14.1	213.5	213.7	213.7	2.09	0.20	21-Apr-03
FSB108D	134	221.1	204.4	16.7	216.6	217.5	217.5	3.28	0.28	3-Apr-03
FSB109D	109	217.8	207.7	10.1	213.7	214.1	214.1	2.06	0.20	9-Apr-03
FSB110D	106	208.9	198.2	10.7	204.1	205.1	205.1	2.94	0.29	21-Apr-03
FSB111D	109	223.2	210.8	12.5	215.0	215.1	215.1	2.09	0.20	11-Apr-03
FSB112D	92	209.6	197.3	12.3	204.3	205.7	205.7	3.76	0.39	17-Apr-03
FSB113D	91	211.0	192.2	18.8	205.9	206.5	206.5	2.99	0.31	8-Apr-03
FSB114D	92	220.0	205.1	15.0	216.2	216.4	216.4	2.25	0.23	9-Apr-03
FSB115D	89	194.6	185.1	9.5	190.8	191.0	191.0	1.50	0.16	2-Apr-03
FSB116D	93	194.1	189.5	4.5	191.6	191.6	191.6	1.11	0.11	2-Apr-03
FSB117D	89	208.0	197.5	10.4	203.3	204.5	204.5	2.91	0.31	22-Apr-03
FSB118D	91	219.0	204.1	15.0	210.7	210.7	210.7	2.28	0.24	8-Apr-03
FSB119D	89	211.9	204.0	7.9	207.7	207.9	207.9	1.81	0.19	21-Apr-03
FSB120D	98	212.9	202.3	10.6	208.2	208.8	208.8	2.73	0.28	10-Apr-03
FSB121DR	90	210.4	199.8	10.6	205.2	206.0	206.0	3.03	0.32	10-Apr-03
FSB122D	91	207.4	192.6	14.8	201.5	202.4	202.4	3.37	0.35	10-Apr-03
FSB123D	92	216.4	207.6	8.8	211.4	211.4	211.4	1.81	0.19	10-Apr-03
FSB150PD	25	210.9	200.0	10.9	204.1	203.0	203.0	3.27	0.65	1-Apr-03
FSL 1D	88	231.3	220.5	10.8	223.7	224.0	224.0	1.95	0.21	15-Apr-03
FSL 2D	101	227.6	219.8	7.8	223.9	224.2	224.2	1.91	0.19	12-Apr-03
FSL 3D	98	231.7	217.2	14.6	221.3	221.6	221.6	2.45	0.25	27-May-03
FSL 4D	83	219.9	210.7	9.2	216.0	216.8	216.8	2.63	0.29	14-Apr-03
FSL 5D	82	244.8	214.8	30.0	220.0	220.1	220.1	3.50	0.39	14-Apr-03
FSL 6D	84	222.6	214.1	8.5	219.0	219.5	219.5	2.09	0.23	23-Apr-03
FSL 7D	84	226.7	212.4	14.3	217.3	217.5	217.5	2.20	0.24	22-Apr-03
FSL 8D	82	220.4	212.1	8.3	216.8	217.1	217.1	1.85	0.20	11-Apr-03
FSL 9D	80	220.0	196.9	23.1	216.3	216.7	216.7	2.81	0.31	22-Apr-03
FSL 10C	24	210.1	207.4	2.8	208.8	208.9	209.9	0.86	0.18	11-Apr-03
FSS 1D	90	227.4	218.4	9.1	222.3	222.0	222.0	2.21	0.23	2-Apr-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
FSS 2D	90	227.0	214.9	12.1	221.5	221.3	221.3	2.26	0.24	2-Apr-03
FSS 3D	81	224.6	215.7	8.8	219.7	219.1	219.1	2.10	0.23	2-Apr-03
FSS 4D	83	222.5	212.4	10.1	217.9	218.0	218.0	2.24	0.25	2-Apr-03
FST 1D	9	128.0	124.8	3.2	125.7	125.4	125.4	0.97	0.32	21-Oct-99
FTF 1	18	256.8	221.1	35.7	228.7	225.1	225.1	8.54	2.01	20-Mar-94
FTF 2	43	255.0	219.3	35.7	226.4	225.1	225.1	6.43	0.98	23-Aug-00
FTF 3	48	248.5	212.6	36.0	224.5	224.5	224.8	4.60	0.66	23-Aug-00
FTF 4	46	227.0	219.0	8.0	224.1	224.5	224.5	1.89	0.28	7-Oct-99
FTF 5	42	228.8	217.8	11.0	224.0	224.9	224.9	2.61	0.40	13-Mar-98
FTF 7	46	227.0	220.2	6.8	223.8	224.0	224.0	1.77	0.26	13-Aug-98
FTF 8	22	235.7	221.7	14.0	225.0	224.9	224.9	2.82	0.60	11-Sep-94
FTF 9	41	225.9	212.1	13.8	221.7	223.1	223.1	4.05	0.63	5-Oct-99
FTF 10	27	225.5	211.3	14.2	220.7	223.3	223.3	5.10	0.98	21-Jan-99
FTF 11	24	229.0	211.4	17.6	220.9	223.7	223.7	5.68	1.16	19-Mar-96
FTF 12	46	229.5	220.5	9.0	226.9	227.1	227.1	1.38	0.20	5-Oct-99
FTF 13	49	241.6	222.0	19.6	226.9	224.8	224.8	5.79	0.83	30-Aug-00
FTF 14	8	226.5	204.9	21.6	222.3	225.8	225.8	7.42	2.62	20-Nov-90
FTF 15	53	270.0	218.8	51.2	225.7	225.1	225.1	6.85	0.94	27-Aug-01
FTF 16	52	235.1	219.6	15.5	223.2	223.6	223.6	2.32	0.32	27-Aug-01
FTF 17	53	227.6	219.8	7.8	223.1	223.6	223.6	1.74	0.24	14-Mar-01
FTF 18	48	235.0	219.3	15.7	223.4	223.2	223.2	2.82	0.41	24-Aug-00
FTF 19	52	232.7	219.2	13.5	222.7	223.0	223.0	2.22	0.31	24-Aug-00
FTF 20	55	225.1	218.7	6.4	221.8	222.0	222.0	1.57	0.21	27-Aug-01
FTF 21	54	226.5	219.5	7.0	222.8	222.7	222.7	1.39	0.19	30-Aug-00
FTF 22	52	226.8	218.3	8.5	221.7	221.8	221.8	1.71	0.24	14-Mar-01
FTF 23	50	228.5	219.2	9.3	222.1	222.1	222.1	1.82	0.26	14-Mar-01
FTF 24A	47	225.8	207.8	18.0	222.3	223.2	223.2	3.30	0.48	6-Oct-99
FTF 25A	49	226.2	219.0	7.3	223.1	223.6	223.6	1.86	0.27	1-Mar-00
FTF 26	47	226.4	219.9	6.5	223.3	223.7	223.7	1.67	0.24	6-Oct-99
FTF 27	46	229.7	218.6	11.1	223.3	223.6	223.6	2.01	0.30	26-Jan-99
GBW 1	37	267.7	174.8	92.9	256.8	260.3	260.3	18.34	3.01	1-Mar-95
H 2	4	239.1	216.5	22.6	232.6	237.4	237.4	10.78	5.39	18-Feb-89
H 6	9	235.1	229.6	5.5	231.8	230.5	230.5	2.10	0.70	18-Feb-89

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
H 7	9	233.6	227.7	5.9	230.1	229.8	229.8	1.99	0.66	18-Feb-89
H 8	11	231.2	226.0	5.2	227.9	227.2	227.2	1.66	0.50	24-Aug-89
H 10	12	231.7	226.3	5.4	228.2	227.9	227.9	1.76	0.51	24-Aug-89
H 11	9	232.1	226.3	5.8	228.8	228.3	228.9	2.01	0.67	18-Feb-89
H 18A	22	228.7	221.7	7.0	224.5	224.5	224.5	1.64	0.35	3-Aug-92
H 19	16	231.8	222.7	9.1	227.3	227.8	228.5	3.21	0.80	9-May-91
HAA 1D	10	280.1	273.5	6.6	276.5	276.1	276.1	2.07	0.65	6-Oct-99
HAA 2D	12	279.5	274.6	5.0	276.6	276.4	276.4	1.34	0.39	4-Jan-99
HAA 3D	25	270.1	258.3	11.9	264.4	263.9	263.9	3.96	0.79	31-Oct-00
HAA 4D	11	272.4	268.3	4.1	269.8	269.7	269.7	1.32	0.40	13-Jan-99
HAA 5D	7	276.6	270.0	6.6	273.8	275.3	275.3	2.79	1.05	16-Jan-03
HAA 6D	11	267.2	263.3	3.9	265.0	264.7	264.7	1.26	0.38	5-Jan-99
HAA 7D	4	270.3	268.0	2.3	269.0	268.9	268.9	1.18	0.59	23-Feb-99
HAA 8D	4	267.9	265.5	2.4	266.6	266.5	266.5	1.25	0.63	23-Feb-99
HAA 9D	6	262.5	257.3	5.2	260.4	260.6	260.6	1.88	0.77	14-Jan-03
HAA 10D	4	267.0	266.2	0.8	266.6	266.6	266.6	0.47	0.23	23-Feb-99
HAA 11D	6	265.8	259.9	5.9	263.9	265.2	265.2	2.38	0.97	15-Jan-03
HAA 12D	6	267.7	262.8	4.9	266.1	267.5	267.8	2.28	0.93	15-Jan-03
HAA 13D	13	268.2	263.1	5.1	266.3	267.8	267.8	2.26	0.63	6-Feb-03
HAA 14D	5	268.8	263.8	5.0	266.8	268.6	268.6	2.58	1.15	15-Jan-03
HAA 15D	7	270.0	264.3	5.8	267.6	269.8	269.8	2.84	1.07	16-Jan-03
HAC 1	28	272.4	266.1	6.3	269.4	269.4	269.4	1.64	0.31	10-Jul-95
HAC 2	28	272.7	265.5	7.2	269.0	269.0	269.0	1.79	0.34	10-Jul-95
HAC 3	29	271.8	265.9	5.9	269.1	269.1	269.1	1.56	0.29	10-Jul-95
HAC 4	28	272.8	266.3	6.5	269.6	269.6	269.6	1.66	0.31	10-Jul-95
HAP 1	24	273.8	268.6	5.2	270.9	270.9	270.9	1.48	0.30	9-Dec-93
HAP 2	30	272.7	268.1	4.6	270.3	270.2	270.8	1.27	0.23	25-Oct-99
HC 8C	1	197.5	197.5	0.0	197.5	197.5	198.0			16-May-88
HCA 1	37	272.6	266.1	6.5	269.2	269.1	269.1	1.52	0.25	5-Aug-97
HCA 2	40	273.7	173.2	100.5	267.4	269.8	269.8	15.39	2.43	19-Oct-99
HCA 3	39	272.3	266.0	6.2	268.9	268.8	268.8	1.50	0.24	19-Oct-99
HCA 4	48	273.0	264.4	8.6	268.9	269.0	269.0	1.87	0.27	11-Sep-01
HCB 2	50	275.8	256.7	19.1	267.9	268.1	268.1	3.03	0.43	16-Jan-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
HCB 3	46	270.8	237.8	33.0	265.8	266.5	266.8	4.66	0.69	22-Oct-99
HCB 4	48	269.2	202.2	67.0	262.9	264.5	264.5	9.33	1.35	22-Oct-99
HET 1D	32	271.7	264.0	7.7	267.9	268.1	268.8	1.83	0.32	18-Oct-99
HET 2D	33	262.8	254.7	8.2	258.6	258.7	258.7	1.91	0.33	18-Oct-99
HET 3D	36	275.3	255.0	20.4	259.4	259.1	259.1	3.29	0.55	18-Oct-99
HET 4D	35	262.7	255.9	6.8	259.5	259.6	259.6	1.69	0.29	18-Oct-99
HGW 2D	1	232.5	232.5	0.0	232.5	232.5	232.9			6-Feb-03
HGW 4D	1	230.4	230.4	0.0	230.4	230.4	230.4			5-Feb-03
HHP 1D	6	272.0	271.2	0.9	271.4	271.2	271.3	0.34	0.14	9-Jun-99
HHP 2D	6	275.8	273.8	2.0	274.6	274.4	274.5	0.92	0.37	7-Jun-99
HMD 1D	61	212.8	204.6	8.2	208.6	208.8	208.8	2.30	0.29	29-Nov-01
HMD 2D	67	207.4	194.9	12.5	199.9	199.8	199.8	2.70	0.33	1-Apr-03
HMD 3D	66	204.0	195.0	9.0	199.2	199.0	199.0	2.31	0.28	1-Apr-03
HMD 4D	70	204.0	192.7	11.3	198.8	198.9	198.9	2.79	0.33	1-Apr-03
HOB 1D	6	242.5	229.3	13.2	234.1	232.4	233.2	5.55	2.26	18-Sep-98
HOB 2D	6	233.9	227.5	6.4	230.4	230.2	231.1	2.98	1.21	18-Sep-98
HOB 3D	6	234.0	227.8	6.2	230.8	230.7	231.0	2.98	1.22	18-Sep-98
HOB 4D	5	236.0	229.7	6.3	232.4	230.7	230.7	3.15	1.41	18-Sep-98
HOB 5D	6	240.2	232.2	8.0	236.1	236.4	236.6	3.79	1.55	18-Sep-98
HOB 7D	6	224.4	219.8	4.6	221.5	220.8	221.2	1.68	0.68	18-Sep-98
HR8 11	50	250.6	227.7	22.9	245.7	245.9	246.8	2.95	0.42	4-Jun-02
HR8 12	48	244.6	212.2	32.4	238.8	239.3	239.7	4.52	0.65	5-Jun-02
HR8 13	47	240.1	209.6	30.5	236.7	237.5	238.1	4.81	0.70	3-Jun-02
HSB 0PD	11	214.6	211.5	3.1	213.4	213.3	213.3	0.94	0.28	1-Apr-03
HSB 25PD	11	215.0	211.5	3.6	213.5	213.4	213.4	1.04	0.31	1-Apr-03
HSB 50PD	11	215.1	211.5	3.7	213.5	213.3	213.3	1.04	0.32	1-Apr-03
HSB 65	119	243.1	222.9	20.2	234.0	234.0	234.0	3.07	0.28	29-Apr-03
HSB 66	132	236.2	209.7	26.6	222.8	224.8	224.8	6.29	0.55	11-Apr-03
HSB 67	127	230.9	210.8	20.2	222.3	223.3	223.3	4.27	0.38	24-Apr-03
HSB 68	104	239.4	170.5	68.9	219.5	221.1	221.1	9.98	0.98	23-Apr-03
HSB 69	129	225.5	133.3	92.2	217.8	219.0	219.0	8.07	0.71	24-Apr-03
HSB 70	119	236.3	214.6	21.7	222.9	223.1	223.1	5.02	0.46	14-Apr-03
HSB 71	115	230.9	213.3	17.7	222.6	223.0	223.0	4.29	0.40	13-Apr-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
HSB 83D	114	229.9	218.2	11.7	224.6	224.3	224.3	1.69	0.16	15-Apr-03
HSB 84D	114	222.5	211.3	11.2	217.5	218.2	218.2	2.72	0.25	23-Apr-03
HSB 86D	111	232.8	215.0	17.8	222.2	222.3	222.3	3.76	0.36	23-Apr-03
HSB100D	112	239.8	213.1	26.7	234.0	234.1	234.1	2.67	0.25	16-Apr-03
HSB100PD	25	219.2	211.1	8.1	214.5	213.8	213.8	2.06	0.41	1-Apr-03
HSB101D	113	236.6	228.4	8.1	231.3	231.2	231.2	1.48	0.14	28-Apr-03
HSB102D	108	233.0	221.9	11.1	228.6	228.4	228.4	1.68	0.16	24-Apr-03
HSB103D	111	229.4	221.6	7.8	224.9	224.9	224.9	1.68	0.16	29-Apr-03
HSB104D	108	229.1	216.5	12.6	223.5	224.1	224.1	2.59	0.25	29-Apr-03
HSB105D	107	229.5	219.4	10.1	224.3	224.5	224.5	2.27	0.22	18-Apr-03
HSB106D	106	229.4	221.2	8.2	225.1	225.1	225.1	1.88	0.18	28-Apr-03
HSB107D	108	228.1	216.4	11.8	223.5	223.9	223.9	2.25	0.22	29-Apr-03
HSB108D	102	226.6	216.8	9.8	222.2	222.8	222.8	2.46	0.24	29-Apr-03
HSB109D	86	225.9	182.5	43.4	221.1	222.3	222.3	5.03	0.54	29-Apr-03
HSB110D	101	225.1	214.0	11.2	220.3	221.2	221.2	2.95	0.29	18-Apr-03
HSB111E	106	255.5	211.0	44.6	220.2	221.1	221.1	4.88	0.47	20-Apr-03
HSB112E	115	226.8	212.9	13.9	220.5	221.6	221.6	3.40	0.32	20-Apr-03
HSB113D	107	227.0	214.2	12.8	220.8	221.5	221.5	3.12	0.30	30-Apr-03
HSB114D	112	228.3	214.4	13.9	221.4	222.0	222.0	3.24	0.31	28-Apr-03
HSB115D	114	250.8	216.3	34.5	223.0	222.9	222.9	3.96	0.37	28-Apr-03
HSB116D	99	243.7	218.1	25.6	225.0	224.6	224.6	4.20	0.42	29-Apr-03
HSB117D	110	231.4	215.2	16.2	222.1	222.2	222.4	3.49	0.33	21-Apr-03
HSB125D	104	227.4	218.5	8.9	220.8	220.7	220.8	1.15	0.11	23-Apr-03
HSB126D	105	206.4	203.8	2.6	205.1	205.2	205.6	0.55	0.05	22-Apr-03
HSB127D	103	220.1	206.1	14.0	215.6	217.5	217.5	3.71	0.37	29-Apr-03
HSB129D	104	210.5	203.7	6.8	207.9	208.1	208.3	1.44	0.14	24-Apr-03
HSB130D	97	202.8	194.0	8.8	200.0	200.0	200.0	0.98	0.10	2-Apr-03
HSB131D	109	207.6	134.8	72.8	204.5	205.1	205.1	6.84	0.66	23-Apr-03
HSB132D	101	227.9	175.9	52.0	219.8	220.5	220.5	5.48	0.55	1-Apr-03
HSB133D	104	240.4	215.4	25.1	235.3	235.3	235.9	2.52	0.25	23-Apr-03
HSB134D	107	226.9	213.1	13.8	221.1	221.3	221.3	2.27	0.22	30-Apr-03
HSB135D	101	220.5	207.7	12.9	216.5	217.6	217.6	2.79	0.28	23-Apr-03
HSB136D	105	223.4	209.0	14.4	218.6	219.8	219.8	3.40	0.33	29-Apr-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
HSB137D	104	225.9	212.8	13.1	219.9	220.7	220.7	3.49	0.34	23-Apr-03
HSB138D	103	231.0	211.7	19.3	222.4	222.4	222.4	3.50	0.34	24-Apr-03
HSB139D	105	228.9	214.0	14.9	220.7	221.3	221.3	3.28	0.32	23-Apr-03
HSB140D	87	221.5	202.9	18.6	213.2	212.7	212.7	2.72	0.29	1-Apr-03
HSB141D	100	249.9	224.5	25.4	238.0	237.9	237.9	5.86	0.59	1-Apr-03
HSB142D	103	200.9	185.7	15.2	197.5	197.4	197.4	1.79	0.18	24-Apr-03
HSB143D	90	216.1	208.8	7.3	212.3	212.3	212.3	1.72	0.12	24-Apr-03
HSB146D	88	232.0	175.3	56.7	220.8	221.3	221.3	5.97	0.64	1-Apr-03
HSB147D	108	237.6	221.9	15.7	229.4	229.4	229.4	3.31	0.22	28-Apr-03
HSB148D	93	218.4	171.5	46.9	212.3	212.5	212.5	4.62	0.48	2-Apr-03
HSB149D	93	228.0	212.3	15.7	220.8	221.7	221.7	3.49	0.36	24-Apr-03
HSB150D	101	233.1	223.1	9.9	226.1	225.1	225.1	2.55	0.25	28-Apr-03
HSB151D	97	210.8	203.7	7.1	206.6	206.6	206.6	1.45	0.15	28-Apr-03
HSB152D	40	209.3	199.5	9.8	202.8	202.0	202.0	2.44	0.39	30-Apr-03
HSL 1D	81	241.1	227.7	13.4	236.0	235.9	235.9	1.96	0.22	29-Apr-03
HSL 2D	83	247.2	239.4	7.8	241.8	241.4	241.4	1.64	0.18	28-Apr-03
HSL 3D	86	261.0	240.4	20.7	249.6	249.2	249.2	2.43	0.26	28-Apr-03
HSL 4D	85	266.0	254.0	12.0	260.9	260.9	260.9	2.72	0.30	29-Apr-03
HSL 5D	85	270.1	204.5	65.7	264.3	266.3	266.3	7.79	0.85	28-Apr-03
HSL 6D	87	266.6	253.2	13.5	258.8	258.4	258.4	2.82	0.30	30-Apr-03
HSL 7D	92	265.6	213.6	52.0	257.7	258.0	258.0	5.57	0.58	29-Apr-03
HSL 8D	93	265.1	255.3	9.8	259.6	259.6	259.6	2.30	0.24	30-Apr-03
HSS 3D	27	287.9	272.2	15.7	281.9	281.6	281.6	3.73	0.72	25-Apr-95
HTF 5	43	297.3	266.2	31.2	278.3	277.6	277.6	5.61	0.85	16-Nov-99
HTF 6	42	298.9	265.6	33.3	277.6	275.9	275.9	6.80	1.05	16-Nov-99
HTF 7	37	281.3	270.3	11.0	275.2	275.3	275.3	2.11	0.35	16-Nov-99
HTF 12D	8	274.9	267.5	7.4	272.4	272.9	273.0	2.50	0.88	15-Jan-03
HTF 13	42	280.7	268.2	12.5	273.6	273.5	273.5	2.30	0.36	13-Jan-99
HTF 14	36	282.2	266.9	15.3	272.4	272.7	272.7	2.50	0.42	13-Jan-99
HTF 15	47	276.2	268.5	7.7	273.0	272.7	272.7	1.66	0.24	23-Sep-98
HTF 15D	9	278.9	266.7	12.2	272.7	271.7	271.7	3.93	1.31	21-Jan-03
HTF 17	51	273.2	253.7	19.5	262.5	262.2	262.6	2.76	0.39	14-Mar-00
HTF 18	55	275.3	263.6	11.7	270.6	270.7	270.7	2.54	0.34	20-Sep-00

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
HTF 19	57	273.2	264.6	8.6	268.5	268.4	268.7	1.85	0.25	20-Sep-00
HTF 20	56	270.9	259.8	11.1	267.4	267.6	267.6	1.99	0.27	20-Sep-00
HTF 21	54	273.9	263.4	10.5	268.6	268.7	269.3	2.21	0.30	20-Sep-00
HTF 22	49	278.7	265.9	12.8	273.9	274.5	274.8	3.12	0.45	14-Sep-00
HTF 23	45	278.0	266.7	11.3	273.7	274.0	274.0	2.71	0.40	14-Sep-00
HTF 24	45	282.7	266.1	16.6	273.3	273.4	273.4	2.90	0.43	14-Jun-00
HTF 25	49	283.8	262.5	21.3	273.3	273.4	273.5	4.21	0.60	14-Sep-00
HTF 26	49	284.0	265.0	19.0	273.8	273.9	273.9	3.74	0.53	14-Sep-00
HTF 27	53	292.9	267.1	25.8	275.0	274.9	274.9	4.42	0.61	5-Sep-01
HTF 28	51	323.3	266.7	56.6	275.2	274.8	275.1	7.54	1.06	14-Sep-00
HTF 29	52	280.9	266.3	14.6	274.2	274.6	274.6	3.02	0.42	14-Sep-00
HTF 30	3	271.0	269.2	1.8	270.1	270.0	270.0	0.90	0.52	23-Jun-86
HTF 31	47	278.7	267.7	11.0	274.2	274.7	275.5	2.70	0.16	14-Sep-00
HTF 32	52	278.1	252.2	25.9	273.0	274.1	274.4	4.05	0.56	5-Sep-01
HTF 34	46	279.9	250.4	29.5	270.1	274.2	274.5	9.01	1.33	14-Sep-00
HWP 1D	2	245.5	245.0	0.4	245.2	245.2	245.2	0.29	0.21	20-Aug-97
HWP 2D	5	264.5	261.1	3.4	262.6	262.4	262.4	1.23	0.55	10-Jun-99
HWS 1A	47	252.4	242.2	10.2	245.9	245.8	245.8	2.48	0.36	19-Oct-99
HWS 2	42	250.9	242.9	8.0	246.2	246.3	246.3	2.26	0.35	19-Oct-99
HWS 3	2	249.9	249.0	0.9	249.5	249.5	250.0	0.64	0.45	10-Apr-85
HXB 1	41	261.1	247.8	13.3	252.8	252.6	253.4	3.42	0.21	23-Oct-00
HXB 4D	26	257.9	247.2	10.7	253.5	253.8	253.8	2.67	0.52	26-Oct-00
HXB 5D	27	257.5	246.8	10.7	252.7	252.7	252.7	2.58	0.50	26-Oct-00
IDB 3	20	254.6	208.0	46.6	239.0	240.9	241.6	12.03	2.69	2-Jan-95
IDB 4	17	257.8	244.4	13.3	249.6	247.8	247.8	4.33	0.28	2-Jan-95
IDB 5	20	255.0	241.8	13.2	248.1	248.1	248.1	3.82	0.85	2-Jan-95
IDB 6	20	264.3	246.7	17.6	258.7	260.7	260.7	4.88	1.09	2-Jan-95
IDB 7	20	266.2	253.6	12.6	259.9	260.8	260.8	3.94	0.88	2-Jan-95
IDB 8	20	245.6	234.8	10.8	239.8	239.7	239.7	2.95	0.66	2-Jan-95
IDP 3D	4	215.5	209.1	6.4	212.6	212.9	212.9	2.69	0.18	17-Aug-93
IDP 4	20	196.3	168.7	27.6	190.0	193.0	193.0	7.36	1.65	3-Jan-95
IDP 5	20	203.3	192.1	11.3	198.4	199.3	199.3	3.34	0.75	5-Jan-95
IDP 6	20	206.5	196.8	9.7	201.5	202.5	202.5	3.29	0.74	4-Jan-95

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
IDP 7	20	206.1	194.4	11.7	200.8	202.0	202.0	3.67	0.82	4-Jan-95
IDP 8	20	204.9	188.3	16.6	199.3	201.1	201.1	4.63	1.03	4-Jan-95
IDP 9	21	209.5	198.2	11.3	203.9	204.9	204.9	3.68	0.80	30-Jun-99
IDQ 4	20	203.5	192.9	10.6	198.4	199.3	199.3	3.17	0.71	4-Jan-95
IDQ 5	19	218.3	190.0	28.2	198.3	196.9	196.9	6.35	1.46	4-Jan-95
IDQ 6	21	198.5	188.1	10.3	193.8	194.6	194.6	3.02	0.66	4-Jan-95
IDQ 7	20	199.3	168.0	31.3	185.1	187.8	187.8	8.10	1.81	4-Jan-95
IDQ 8	16	198.0	154.9	43.1	187.7	189.2	189.2	9.96	2.49	4-Jan-95
IDQ 9	12	191.5	180.1	11.4	183.9	182.4	182.4	4.14	0.30	4-Jan-95
IDQ 10	20	191.9	148.8	43.1	175.2	174.2	174.2	8.92	1.99	4-Jan-95
IDQ 11	3	140.9	135.5	5.4	137.9	137.2	137.5	2.78	1.61	12-Dec-91
IDQ 12	14	191.2	181.6	9.6	187.3	187.7	187.9	2.50	0.67	4-Jan-95
K 301P	48	208.9	202.3	6.6	205.1	205.4	205.8	1.72	0.25	30-Jan-96
KAB 1	43	218.4	201.7	16.7	207.7	207.9	207.9	4.03	0.61	1-Mar-96
KAB 2	46	221.2	201.4	19.8	211.1	212.6	212.6	5.21	0.77	13-Oct-99
KAB 3	41	215.9	195.2	20.7	205.3	205.3	205.3	4.33	0.68	23-Feb-95
KAB 4	43	216.0	195.9	20.1	204.6	204.0	204.0	4.60	0.70	13-Oct-99
KAC 1	47	225.5	214.8	10.7	219.0	218.8	218.8	2.77	0.40	1-Mar-96
KAC 2	44	226.8	215.6	11.2	220.8	220.9	220.9	3.15	0.47	10-Jul-95
KAC 3	47	226.7	216.2	10.5	221.2	221.1	221.1	2.77	0.40	1-Mar-96
KAC 4	44	223.1	213.7	9.4	217.7	217.5	218.4	2.52	0.38	10-Jul-95
KAC 5	29	226.7	218.4	8.4	222.4	222.1	222.1	2.39	0.44	10-Jul-95
KAC 6	28	226.7	218.2	8.5	222.3	221.9	221.9	2.45	0.46	10-Jul-95
KAC 7	30	224.1	215.5	8.6	219.5	219.5	219.5	2.29	0.42	1-Mar-96
KAC 8	15	224.5	218.5	6.0	221.2	220.4	221.2	2.02	0.52	7-Jul-95
KAC 9	15	224.4	218.4	6.0	220.8	220.1	220.5	1.89	0.49	29-Feb-96
KBP 1D	7	210.9	205.2	5.7	207.3	206.8	207.2	2.29	0.86	18-Jun-99
KBP 2D	8	209.8	203.2	6.6	204.8	203.4	204.3	2.52	0.89	18-Jun-99
KCB 1	57	216.5	195.5	21.0	205.4	205.7	205.7	4.38	0.58	1-May-03
KCB 2	47	214.3	192.5	21.8	204.5	204.5	204.5	4.32	0.63	29-May-96
KCB 3	57	213.2	192.2	21.0	202.7	203.0	203.0	4.32	0.57	1-May-03
KCB 4	28	216.9	202.1	14.8	207.7	208.0	208.0	3.47	0.66	18-Feb-91
KCB 5	17	202.8	191.3	11.5	196.8	196.9	196.9	3.42	0.83	1-May-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
KCB 6	14	203.0	191.5	11.5	197.5	197.6	197.6	3.56	0.95	1-May-03
KCB 7	10	207.2	203.3	3.9	205.3	205.3	205.3	1.49	0.47	27-Jan-99
KDB 1	116	211.7	189.2	22.5	206.0	206.5	206.6	3.84	0.36	30-May-03
KDB 2	120	211.1	182.7	28.4	204.4	205.0	205.1	4.29	0.39	30-May-03
KDB 3	119	211.9	184.5	27.4	205.3	206.1	206.1	4.21	0.39	30-May-03
KDB 4	49	209.9	197.4	12.5	203.5	205.5	205.5	4.19	0.29	30-May-03
KDB 5	101	209.8	172.1	37.7	201.9	202.2	202.2	4.77	0.47	28-May-03
KDT 1D	19	211.1	205.3	5.8	208.1	208.5	208.5	1.63	0.37	15-Dec-94
KRB 8	22	211.8	207.5	4.3	209.5	209.1	209.1	1.28	0.27	24-Aug-90
KRB 13	21	239.0	203.9	35.1	208.2	205.9	205.9	8.08	1.76	24-Aug-90
KRB 16D	28	211.5	202.2	9.3	207.9	208.8	208.8	2.63	0.50	28-Jan-03
KRB 17D	30	209.1	199.2	9.9	204.5	205.4	205.4	2.66	0.49	24-Mar-03
KRB 18D	30	206.7	198.7	8.0	203.2	203.9	203.9	2.36	0.43	24-Mar-03
KRB 19D	29	205.9	198.5	7.4	202.8	203.3	203.3	2.01	0.37	28-Jan-03
KRP 1	54	224.8	208.8	16.1	218.8	218.5	218.5	2.65	0.36	22-Oct-99
KRP 2	49	224.4	215.5	8.9	219.3	219.0	219.0	2.32	0.33	11-Nov-98
KRP 3	48	226.8	214.1	12.8	219.2	218.5	218.5	2.85	0.41	22-Oct-99
KRP 4	56	229.9	209.4	20.5	224.1	224.5	224.5	4.45	0.59	27-May-03
KRP 5	12	217.3	206.9	10.4	211.5	209.7	209.7	4.29	1.24	27-May-03
KRP 6	15	228.4	207.9	20.5	214.7	217.2	217.6	5.75	1.48	27-May-03
KRP 7	17	218.2	206.4	11.7	211.6	210.6	210.6	4.37	1.06	27-May-03
KRP 8	10	224.0	207.2	16.8	213.0	210.9	211.0	5.60	1.77	27-May-03
KRP 9	11	219.9	208.9	11.0	212.7	211.9	212.0	3.83	1.15	27-May-03
KSB 1	75	252.8	200.2	52.7	205.2	204.6	204.6	5.96	0.69	22-Apr-96
KSB 2	79	209.0	181.7	27.3	203.9	204.1	204.1	3.34	0.38	14-Oct-99
KSB 3	78	208.5	177.6	31.0	203.2	203.4	203.8	3.69	0.42	14-Oct-99
KSB 4A	73	208.4	193.5	14.8	203.9	204.4	204.9	3.33	0.39	22-Apr-96
KSB 5D	10	205.5	202.5	2.9	204.3	204.3	204.3	1.02	0.32	14-Oct-99
KSM 1D	42	210.8	199.4	11.4	207.1	208.1	208.1	2.89	0.45	27-Jan-03
KSS 1D	30	178.2	168.1	10.1	173.9	174.5	174.5	2.74	0.50	3-Jun-03
KSS 2D	29	168.3	160.9	7.4	164.5	165.4	165.5	2.31	0.43	2-Jun-03
KSS 3D	29	167.8	154.3	13.5	163.7	164.7	165.3	2.94	0.55	2-Jun-03
LAC 1	44	223.8	210.0	13.8	216.0	216.3	216.3	2.95	0.45	21-Jun-95

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
LAC 2	48	223.8	202.6	21.3	215.6	216.2	216.2	3.99	0.58	13-Nov-02
LAC 3	48	223.6	211.6	12.0	216.0	216.4	216.4	2.85	0.41	17-Nov-99
LAC 4	45	223.5	193.2	30.3	214.4	215.1	215.1	5.45	0.81	13-Nov-02
LAC 5DU	8	223.8	212.2	11.6	218.6	218.6	218.6	3.23	1.14	28-Sep-00
LAC 6DU	6	223.2	216.8	6.4	219.0	218.5	218.5	2.27	0.93	21-Jun-95
LAC 7DU	7	222.5	211.1	11.4	217.1	217.2	217.2	3.41	1.29	28-Sep-00
LAC 8DU	7	222.4	210.5	11.9	217.0	217.4	217.4	3.54	1.34	26-Sep-00
LBP 1D	9	272.3	257.0	15.4	260.8	258.9	259.2	4.99	1.66	16-Jun-99
LBP 2D	6	271.0	256.0	15.1	260.4	259.1	259.9	5.60	2.29	15-Jun-99
LBP 3D	7	270.8	256.5	14.3	260.2	258.2	258.7	5.10	1.93	16-Jun-99
LCO 1	46	221.2	206.7	14.5	214.2	214.4	214.4	3.17	0.47	7-May-97
LCO 2	46	220.9	207.8	13.1	215.1	215.1	215.1	3.06	0.45	7-May-97
LCO 3	44	222.0	210.7	11.3	215.5	215.6	215.6	2.76	0.42	22-Jun-95
LCO 4	47	219.3	202.9	16.4	212.0	211.8	211.8	3.55	0.52	13-May-97
LCO 8DU	6	224.5	218.7	5.8	220.6	220.3	220.3	2.05	0.84	22-Jun-95
LDB 1	118	225.2	186.1	39.1	214.4	215.2	215.2	5.31	0.49	30-May-03
LDB 2	120	227.2	185.1	42.1	216.6	217.1	217.4	4.93	0.45	30-May-03
LDB 3	90	225.5	200.4	25.1	215.3	216.0	216.0	4.45	0.47	30-May-03
LDB 4	64	223.5	209.7	13.8	215.0	214.8	214.8	3.08	0.21	28-May-03
LFP 1WP	6	135.1	134.6	0.5	134.8	134.8	135.5	0.15	0.06	9-Oct-02
LFP 2WP	6	134.8	134.3	0.5	134.6	134.7	135.5	0.16	0.07	9-Oct-02
LFP 3WP	2	134.2	134.0	0.2	134.1	134.1	134.9	0.16	0.11	1-May-02
LFP 4WP	8	132.9	131.9	1.0	132.5	132.5	133.1	0.32	0.11	28-Apr-03
LFP 5WP	11	134.1	132.8	1.3	133.6	133.8	134.7	0.43	0.13	29-Apr-03
LFP 6WP	11	136.3	133.5	2.8	134.8	135.1	135.8	0.85	0.26	17-Apr-03
LFP 7WP	3	134.2	133.4	0.8	133.9	134.1	134.8	0.45	0.26	9-Oct-02
LFP 9WP	4	131.3	130.9	0.3	131.1	131.1	131.7	0.14	0.07	9-Oct-02
LFP 10WP	5	133.2	132.1	1.0	132.8	133.0	133.7	0.41	0.18	9-Oct-02
LFP 11WP	8	132.7	131.8	0.9	132.3	132.4	133.1	0.26	0.09	29-Apr-03
LFP 12WP	9	129.9	128.5	1.4	129.1	129.0	129.5	0.43	0.14	28-Apr-03
LFP 13WP	8	133.1	131.5	1.6	132.3	132.4	132.7	0.67	0.24	28-Apr-03
LFP 14WP	11	130.1	124.5	5.6	128.5	128.6	129.1	1.51	0.45	29-Apr-03
LFW 6	49	156.8	147.5	9.3	153.8	154.2	154.2	1.89	0.27	7-Feb-96

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
LFW 6R	42	156.3	150.0	6.3	152.5	152.5	152.5	1.47	0.23	16-Apr-03
LFW 7	49	154.8	150.1	4.7	152.1	152.1	152.1	1.21	0.17	15-Dec-95
LFW 8	52	152.5	147.9	4.6	149.9	149.7	149.7	1.15	0.16	8-Feb-96
LFW 8R	43	151.7	146.7	5.0	148.8	148.7	148.7	1.09	0.17	30-Apr-03
LFW 9	10	151.1	147.0	4.1	149.2	149.1	149.1	1.26	0.40	2-Oct-86
LFW 10A	85	161.4	148.4	13.0	154.8	156.1	156.1	4.01	0.44	16-Apr-03
LFW 16	47	158.3	152.5	5.8	155.3	155.4	155.4	1.60	0.23	9-Dec-95
LFW 17	48	157.2	147.2	10.1	153.8	154.0	154.0	2.66	0.38	15-Dec-95
LFW 18	87	166.5	150.4	16.1	159.0	161.4	161.4	5.35	0.57	16-Apr-03
LFW 19	47	160.7	153.4	7.3	156.0	156.3	156.3	1.57	0.23	16-Dec-95
LFW 20	48	162.0	140.3	21.8	158.1	159.2	159.2	4.11	0.59	8-Dec-95
LFW 21	88	163.1	145.5	17.7	154.6	155.2	155.2	5.47	0.58	16-Apr-03
LFW 22	48	155.5	135.0	20.5	150.8	150.8	150.8	2.85	0.41	18-Dec-95
LFW 23	49	156.4	132.6	23.8	150.8	151.6	151.6	4.23	0.60	6-Feb-96
LFW 24	47	159.2	132.9	26.3	153.7	154.0	154.0	3.65	0.53	13-Dec-95
LFW 25	47	161.2	135.3	26.0	156.1	156.4	156.7	3.67	0.53	13-Dec-95
LFW 26	37	164.2	158.1	6.2	161.1	161.5	161.5	1.77	0.29	8-Dec-95
LFW 27	38	165.1	158.6	6.5	162.0	162.3	162.3	1.81	0.29	8-Dec-95
LFW 28	51	167.3	144.2	23.2	162.9	163.5	163.6	3.26	0.46	6-Aug-01
LFW 29	42	168.1	159.5	8.6	164.2	164.8	164.8	2.25	0.35	9-Apr-03
LFW 30	54	168.4	150.0	18.4	163.8	164.9	165.1	3.43	0.47	20-Aug-02
LFW 31	81	176.0	145.3	30.7	162.2	162.9	162.9	5.43	0.60	31-Oct-02
LFW 32	56	165.4	147.2	18.2	161.6	162.4	162.4	2.78	0.37	20-Aug-02
LFW 33	40	164.0	157.8	6.2	160.9	161.3	161.3	1.75	0.28	22-Apr-96
LFW 34	53	162.6	146.6	16.0	159.0	159.8	159.8	3.10	0.43	20-Aug-02
LFW 35	38	161.6	155.5	6.1	158.7	159.1	159.1	1.70	0.28	8-Dec-95
LFW 36	42	148.4	142.0	6.4	146.0	146.0	146.0	1.16	0.18	16-Dec-95
LFW 36R	44	148.9	144.0	5.0	145.7	145.6	146.0	1.03	0.16	30-Apr-03
LFW 37	41	145.1	140.9	4.1	142.9	142.8	142.8	0.95	0.15	16-Dec-95
LFW 38	38	146.2	135.7	10.5	143.4	143.4	143.4	1.69	0.27	9-Dec-95
LFW 39	38	146.8	136.3	10.5	143.7	143.6	143.6	1.70	0.28	9-Dec-95
LFW 40	33	146.0	137.4	8.6	143.6	143.5	143.5	1.57	0.27	7-Sep-94
LFW 41	41	149.9	134.9	15.0	145.2	145.4	145.4	2.41	0.38	6-Feb-96

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
LFW 41R	44	149.1	123.3	25.8	142.1	142.3	142.5	3.55	0.53	8-Apr-03
LFW 42	41	151.0	135.9	15.1	147.4	147.3	147.3	2.33	0.36	11-Dec-95
LFW 43D	69	170.2	153.1	17.1	164.6	165.0	165.0	2.93	0.35	8-Apr-03
LFW 44D	25	156.4	150.6	5.8	154.5	155.0	155.0	1.74	0.35	20-Aug-02
LFW 45D	63	154.7	148.7	6.0	151.6	151.7	151.7	1.38	0.17	9-Apr-03
LFW 46D	19	152.5	150.5	2.0	151.5	151.4	151.4	0.62	0.14	4-Dec-95
LFW 47D	63	151.1	146.4	4.6	148.8	148.9	148.9	0.99	0.12	8-Apr-03
LFW 48D	26	150.7	146.5	4.2	149.3	149.4	149.4	0.89	0.17	4-Nov-02
LFW 55D	19	147.9	146.5	1.4	147.1	147.0	147.5	0.41	0.09	5-Dec-95
LFW 56D	65	146.6	143.3	3.3	145.0	145.1	145.1	0.74	0.09	9-Apr-03
LFW 57D	33	144.8	141.7	3.1	143.4	143.7	143.7	0.85	0.15	8-Apr-03
LFW 58D	70	143.4	139.0	4.4	141.4	141.5	141.5	0.86	0.10	17-Apr-03
LFW 59D	64	146.6	131.8	14.8	142.5	142.3	142.3	1.94	0.24	1-May-03
LFW 60D	69	139.5	136.3	3.2	137.9	138.0	138.0	0.61	0.07	16-Apr-03
LFW 61D	65	148.2	140.1	8.0	143.3	142.8	142.8	1.91	0.24	9-Apr-03
LFW 62D	54	145.8	140.1	5.7	142.8	142.8	142.8	1.31	0.18	2-Apr-03
LFW 63D	55	142.9	138.8	4.1	140.1	140.1	140.1	0.74	0.10	9-Apr-03
LFW 64D	57	142.7	138.9	3.8	140.1	140.0	140.5	0.53	0.07	30-Apr-03
LFW 65D	54	145.0	135.6	9.4	138.1	137.8	138.4	1.46	0.20	8-Apr-03
LFW 66D	27	144.0	138.4	5.6	141.3	141.1	141.1	1.67	0.32	8-Apr-03
LFW 67D	53	146.0	123.0	23.0	140.7	140.5	140.5	3.08	0.42	9-Apr-03
LFW 68D	53	148.0	138.6	9.4	141.9	141.7	141.7	1.96	0.27	9-Apr-03
LFW 69D	56	138.9	136.6	2.3	137.6	137.6	137.6	0.47	0.06	30-Apr-03
LFW 70D	21	136.4	134.4	2.0	135.3	135.4	135.4	0.52	0.11	31-Oct-02
LFW 71D	53	139.5	135.3	4.2	137.0	136.9	137.1	0.92	0.13	8-Apr-03
LFW 72D	10	140.1	137.7	2.4	138.7	138.6	138.6	0.87	0.27	23-Jul-96
LFW 74D	24	164.6	159.0	5.6	161.8	162.3	162.3	1.90	0.15	4-Nov-02
LFW 75D	23	164.6	158.1	6.5	161.4	161.9	161.9	2.26	0.47	8-Jul-02
LFW 76	18	161.5	153.1	8.4	157.0	156.5	156.5	2.70	0.64	20-Aug-02
LFW 77	2	165.9	164.0	1.8	164.9	164.9	165.5	1.29	0.91	10-Aug-98
LFW 78	15	168.1	155.9	12.2	160.2	159.4	159.4	3.97	1.03	20-Aug-02
LRP 1	47	213.8	204.0	9.8	208.7	209.3	209.3	2.89	0.42	18-Oct-99
LRP 2	49	226.7	195.8	30.9	209.8	209.9	209.9	4.89	0.70	18-Oct-99

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
LRP 3	50	214.2	204.3	9.9	209.0	209.6	209.6	2.92	0.41	18-Oct-99
LRP 4	47	213.5	203.9	9.6	208.4	208.8	209.3	2.83	0.41	18-Oct-99
LRP 6	2	210.4	210.2	0.2	210.3	210.3	210.4	0.11	0.08	12-Mar-98
MCB 2	85	229.1	215.2	14.0	222.8	223.6	223.6	3.54	0.38	9-May-03
MCB 4	67	228.7	210.9	17.9	223.2	224.2	224.2	3.66	0.45	8-May-03
MCB 5	71	229.0	215.3	13.7	224.4	225.0	225.0	2.54	0.17	14-May-03
MCB 6	70	224.4	213.3	11.2	218.2	219.0	219.0	3.24	0.39	1-Nov-00
MCB 8D	32	229.2	210.1	19.1	224.7	225.7	225.7	3.59	0.63	13-May-03
MCB 9D	45	226.5	212.2	14.3	221.5	223.0	223.0	3.81	0.57	12-May-03
MCB 10D	2	239.1	238.8	0.3	239.0	239.0	239.0	0.21	0.15	8-Apr-96
MCB 10DR	7	226.7	218.0	8.7	225.0	226.1	226.1	3.12	1.18	8-May-03
MCB 11D	17	221.4	209.4	12.0	217.7	218.8	218.8	3.52	0.85	9-May-03
MCB 13D	8	225.5	224.5	1.0	224.9	224.7	224.7	0.41	0.14	21-Aug-99
MGA 36	21	251.8	235.5	16.3	240.1	237.3	237.3	5.21	1.14	21-Jun-94
MGC 9	32	232.6	226.1	6.5	229.7	229.7	229.7	1.55	0.27	14-Jun-95
MGC 11	15	239.2	229.4	9.8	233.2	232.7	232.7	2.77	0.72	10-Aug-93
MGC 19	31	236.6	225.6	11.0	232.4	232.3	232.3	2.05	0.37	10-Sep-94
MGC 23	20	245.7	225.9	19.8	234.7	234.4	234.4	4.06	0.91	21-Jun-94
MGC 32	30	251.0	242.3	8.7	245.4	245.2	245.2	2.04	0.37	10-Sep-94
MGC 36	30	241.2	232.9	8.3	236.4	236.4	236.4	2.10	0.38	21-Jun-94
MGE 9	30	234.6	219.9	14.7	227.8	228.6	228.6	3.75	0.69	10-Sep-94
MGE 15	1	231.2	231.2	0.0	231.2	231.2	231.2			13-Nov-86
MGE 21	26	237.0	221.3	15.7	231.3	234.0	234.0	5.25	1.03	14-Jun-95
MGE 30	30	241.7	223.7	18.0	236.6	237.0	237.0	3.15	0.57	21-Jun-94
MGE 34	23	252.4	232.6	19.8	240.5	238.4	238.4	4.97	1.04	10-Sep-94
MGG 15	20	242.0	222.2	19.8	232.8	233.0	233.0	4.60	1.03	28-Dec-93
MGG 19	26	238.0	218.2	19.8	231.7	232.9	232.9	4.53	0.89	14-Jun-95
MGG 23	26	237.6	216.0	21.6	232.7	234.3	234.3	5.55	1.09	14-Jun-95
MGG 28	23	241.1	214.7	26.4	233.5	235.3	235.3	6.46	1.35	28-Dec-93
MGG 36	29	249.2	229.4	19.8	238.6	238.0	238.0	3.97	0.74	10-Sep-94
MSB 1A	38	244.7	220.0	24.7	235.0	235.0	235.0	5.44	0.35	13-Mar-96
MSB 1D	88	232.4	220.5	11.8	229.0	229.9	229.9	2.92	0.31	2-Apr-03
MSB 2A	46	245.20	230.86	14.34	236.6	235.2	235.2	4.21	0.27	19-Jun-96

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
MSB 2D	86	233.2	221.1	12.1	229.5	230.5	230.5	3.03	0.33	2-Apr-03
MSB 4A	31	244.6	229.5	15.1	235.3	234.2	234.2	4.97	0.32	13-Mar-96
MSB 4D	80	231.8	221.2	10.6	228.4	229.0	229.1	2.56	0.29	11-Oct-02
MSB 5A	80	242.5	219.8	22.7	229.0	227.9	227.9	4.83	0.31	3-Apr-03
MSB 6A	104	240.6	216.0	24.6	228.0	227.3	227.3	4.02	0.26	2-Apr-03
MSB 7A	119	241.0	215.2	25.9	228.5	228.2	228.2	3.96	0.36	2-Apr-03
MSB 8A	89	243.3	217.8	25.5	230.3	230.0	230.0	4.79	0.31	3-Apr-03
MSB 9C	66	259.3	212.8	46.6	230.9	231.1	231.1	5.72	0.70	8-Apr-02
MSB 11E	31	242.3	214.7	27.7	231.5	239.8	239.8	5.00	0.33	23-Jun-99
MSB 11F	60	235.3	226.1	9.2	230.8	231.2	231.2	2.13	0.14	13-Sep-02
MSB 13C	37	264.6	196.0	68.6	227.5	228.6	228.6	9.26	1.52	21-Sep-99
MSB 13D	99	229.7	216.9	12.9	226.4	227.6	227.6	3.10	0.31	2-Apr-03
MSB 14C	52	238.3	231.4	6.9	233.1	232.5	232.5	1.40	0.09	23-Oct-00
MSB 15C	60	248.9	236.0	12.9	243.9	243.7	243.7	1.63	0.21	23-Sep-00
MSB 15D	88	238.5	219.5	18.9	232.3	233.1	233.1	3.97	0.26	2-Apr-03
MSB 16C	65	232.6	224.4	8.2	229.7	230.1	230.1	2.03	0.13	11-Dec-01
MSB 17D	56	228.6	224.1	4.5	226.7	226.9	226.9	1.20	0.16	21-Sep-99
MSB 18C	76	234.4	220.1	14.3	227.7	228.2	228.2	3.12	0.36	5-Sep-02
MSB 20C	73	234.0	224.9	9.1	227.7	227.5	227.5	1.99	0.13	20-Sep-00
MSB 21C	100	237.2	211.4	25.9	228.4	229.0	229.0	3.58	0.36	2-Apr-03
MSB 22	29	243.9	204.8	39.1	230.5	232.0	232.0	9.16	1.70	19-Mar-97
MSB 24	98	255.5	231.4	24.1	235.2	235.2	235.2	2.43	0.25	4-Apr-03
MSB 26	59	237.9	220.7	17.2	232.5	237.3	237.3	5.92	0.39	26-Mar-03
MSB 27	93	242.0	231.4	10.6	238.4	238.0	238.0	1.88	0.12	5-Mar-01
MSB 28	115	235.4	221.0	14.4	230.3	230.4	230.4	3.35	0.31	4-Apr-03
MSB 29D	108	237.7	217.3	20.4	231.6	232.4	232.9	3.34	0.32	3-Apr-03
MSB 29DD	30	234.01	230.20	3.81	232.6	232.9	232.9	1.11	0.07	22-Sep-99
MSB 30C	100	235.6	224.8	10.8	231.6	231.4	231.4	2.44	0.24	23-Sep-00
MSB 31C	95	238.4	224.0	14.4	233.0	234.1	234.1	3.29	0.34	3-Apr-03
MSB 32	93	229.3	205.3	24.0	223.7	224.4	225.0	2.78	0.29	4-Apr-03
MSB 33	83	222.4	192.6	29.8	217.3	217.8	217.8	3.16	0.35	3-Apr-03
MSB 34C	85	234.6	198.2	36.4	229.3	229.2	229.2	4.74	0.51	1-Apr-03
MSB 35D	21	243.7	238.4	5.3	242.8	243.6	243.6	1.80	0.12	3-Apr-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
MSB 36D	76	238.2	227.5	10.7	234.8	235.3	235.3	3.35	0.22	8-Jan-03
MSB 37D	47	233.7	227.8	5.9	231.3	231.4	231.4	1.43	0.09	23-Sep-00
MSB 38D	36	235.5	232.4	3.1	233.9	234.0	234.0	0.85	0.06	23-Jun-99
MSB 39D	103	241.9	223.1	18.9	230.9	231.4	231.4	3.09	0.30	3-Apr-03
MSB 40D	54	230.0	221.7	8.3	226.8	227.6	227.6	2.31	0.15	3-Apr-03
MSB 41D	46	241.2	241.0	0.2	241.1	241.1	241.1	0.05	0.00	1-Apr-03
MSB 42D	57	235.1	226.1	9.0	231.8	232.5	232.5	2.40	0.16	20-Aug-02
MSB 43DD	31	233.2	229.5	3.7	231.5	231.5	231.5	1.04	0.19	22-Sep-99
MSB 44C	61	240.5	229.6	10.9	234.6	234.7	234.7	2.39	0.31	24-Jun-00
MSB 46C	47	241.3	233.3	8.0	239.7	240.3	240.3	1.67	0.11	6-Mar-01
MSB 47D	90	236.4	227.2	9.2	232.8	233.3	233.3	2.09	0.22	2-Apr-03
MSB 48D	65	234.7	227.4	7.3	233.0	232.8	232.8	1.81	0.12	8-Sep-01
MSB 49D	95	232.4	218.5	13.9	227.3	228.0	228.0	3.23	0.33	3-Apr-03
MSB 50D	67	211.3	200.0	11.3	202.5	202.5	202.5	1.42	0.17	30-Apr-03
MSB 51D	77	212.7	207.3	5.5	209.8	209.8	209.8	1.34	0.15	3-Apr-03
MSB 52D	70	240.3	217.1	23.2	236.9	237.8	237.8	3.42	0.41	15-Jan-02
MSB 53D	64	235.3	227.8	7.4	233.0	233.0	233.0	1.53	0.10	24-Sep-01
MSB 54D	89	236.5	217.4	19.0	232.1	233.3	233.3	3.51	0.37	11-Oct-02
MSB 55D	69	237.1	228.9	8.2	233.8	233.8	233.8	1.42	0.09	20-Mar-01
MSB 56D	78	226.8	216.0	10.8	220.8	220.9	220.9	1.44	0.16	25-Sep-01
MSB 57D	65	233.3	227.6	5.7	230.9	231.1	231.3	1.47	0.18	23-Oct-00
MSB 58D	73	233.0	226.2	6.7	230.6	230.9	230.9	1.57	0.18	23-Oct-00
MSB 59D	90	231.8	220.4	11.4	228.1	229.1	229.1	3.10	0.33	2-Apr-03
MSB 60D	67	232.1	226.8	5.3	229.9	230.0	230.2	1.39	0.17	24-Oct-00
MSB 61D	61	228.0	222.4	5.6	225.2	225.3	225.3	1.46	0.19	22-Sep-99
MSB 62D	89	230.8	218.6	12.2	227.6	228.5	228.5	3.04	0.32	4-Apr-03
MSB 63D	87	231.1	213.2	17.9	227.9	229.0	229.0	3.30	0.35	3-Apr-03
MSB 64D	83	228.7	217.2	11.5	225.3	226.2	226.2	2.85	0.31	2-Apr-03
MSB 65D	71	236.5	228.1	8.4	233.1	233.4	233.4	1.74	0.11	30-Mar-01
MSB 66D	46	234.4	228.3	6.1	231.6	231.6	231.6	1.41	0.09	28-Sep-00
MSB 67D	70	235.3	223.5	11.8	232.6	233.4	233.4	2.84	0.19	4-Apr-03
MSB 68D	54	236.4	219.0	17.4	233.8	234.2	234.2	2.32	0.32	29-Jun-00
MSB 69D	81	239.7	226.3	13.4	232.7	233.1	233.1	2.32	0.26	1-Apr-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
MSB 70D	81	223.3	212.9	10.5	219.5	220.2	220.2	2.76	0.31	2-Apr-03
MSB 74D	79	237.0	226.1	10.9	231.5	232.0	232.0	2.48	0.28	3-Apr-03
MSB 77D	62	237.6	213.0	24.6	232.6	233.8	233.8	3.82	0.49	1-Apr-03
MSB 78D	28	225.9	219.2	6.7	224.2	224.6	224.6	1.67	0.31	15-Mar-96
MSB 78DR	45	224.5	213.7	10.8	220.2	220.8	220.8	3.02	0.20	4-Apr-03
MSB 79C	78	211.8	202.6	9.1	208.6	209.4	210.4	2.44	0.28	3-Apr-03
MSB 82D	75	234.8	225.1	9.7	232.0	232.6	232.6	2.44	0.28	20-Aug-02
MSB 83D	62	234.9	214.2	20.8	232.8	233.3	233.3	2.81	0.36	10-Dec-01
MSB 85D	77	234.8	223.1	11.7	231.5	232.7	232.7	2.98	0.20	1-Apr-03
MSB 87C	46	244.4	236.2	8.2	241.0	242.0	242.0	3.08	0.45	1-Apr-03
MSB 88D	30	206.7	202.0	4.7	205.1	205.2	205.2	0.92	0.17	15-Jan-02
MSB 89C	45	231.6	185.3	46.3	227.3	228.6	229.2	6.79	1.01	3-Apr-03
MWD 1D	11	273.2	264.2	9.1	268.4	267.5	267.5	3.10	0.93	10-Mar-95
MWD 2D	11	272.5	263.9	8.7	269.0	269.1	269.2	2.68	0.81	10-Mar-95
MWD 5D	11	271.7	263.7	8.1	268.3	268.4	268.4	2.55	0.77	10-Mar-95
MWD 8	11	273.0	265.1	7.9	269.7	269.6	269.6	2.48	0.75	10-Mar-95
MWD 9	11	272.2	264.7	7.5	268.6	268.4	269.1	2.41	0.73	10-Mar-95
NBG 1	44	226.6	221.6	5.0	224.4	224.3	224.3	1.07	0.16	21-Oct-02
NBG 2	42	227.1	222.2	4.9	225.0	225.0	225.0	1.11	0.17	21-Oct-02
NBG 3	43	228.0	211.0	16.9	217.7	217.5	217.5	2.66	0.41	22-Oct-02
NBG 4	42	222.4	207.3	15.1	217.0	217.0	217.0	2.40	0.37	22-Oct-02
NBG 5	43	221.5	210.6	10.9	217.5	217.7	217.7	2.25	0.34	22-Oct-02
NEB 12D	5	250.6	250.0	0.6	250.3	250.3	250.3	0.23	0.10	28-May-02
NEB 14D	1	250.0	250.0	0.0	250.0	250.0	250.9			4-Apr-02
NEB 15D	1	250.8	250.8	0.0	250.8	250.8	251.2			3-Apr-02
NEB 16D	1	247.7	247.7	0.0	247.7	247.7	247.7			4-Apr-02
NEB 17DU	2	251.9	251.4	0.6	251.7	251.7	251.7	0.39	0.28	14-May-02
NEB 18DU	3	249.6	249.2	0.3	249.5	249.6	249.6	0.20	0.11	15-May-02
NEB 20DU	2	243.1	243.1	0.0	243.1	243.1	243.8	0.00	0.00	4-Apr-02
NEB 21DU	1	242.8	242.8	0.0	242.8	242.8	243.3			26-Mar-02
NEP 1D	10	191.3	189.6	1.7	190.4	190.4	190.4	0.53	0.17	1-Apr-03
NEP 2D	10	195.0	193.4	1.5	194.2	194.2	194.2	0.50	0.16	1-Apr-03
NEP 4D	10	192.9	188.1	4.9	191.4	191.6	191.6	1.33	0.42	1-Apr-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
NPM 1	24	292.8	269.3	23.4	273.3	272.9	272.9	6.4	1.31	28-Apr-03
NPM 2	12	276.1	267.8	8.2	271.8	271.6	272.4	2.58	0.74	28-Feb-95
NPM 3	12	278.6	271.9	6.7	274.6	273.9	274.5	2.17	0.63	28-Feb-95
NPM 4	12	288.2	280.4	7.8	284.2	284.3	285.1	2.33	0.67	28-Feb-95
NPM 19A	36	277.6	253.5	24.1	263.7	263.7	263.7	7.5	1.24	3-Apr-03
NPM 34A	18	294.52	282.41	12.1	289.7	290.3	290.4	3.40	0.81	3-Apr-03
NPN 1	24	292.76	269.33	23.4	275.9	274.0	274.0	7.00	1.43	28-Apr-03
NPN 2	27	290.49	264.82	25.7	271.4	269.4	269.4	6.70	1.29	28-Apr-03
NPN 3	22	290.23	268.15	22.1	275.1	272.7	272.7	6.40	1.36	28-Apr-03
NPN 4	27	289.68	270.85	18.8	276.5	275.0	275.0	5.30	1.02	28-Apr-03
NTN 1	27	243.74	227.78	16.0	232.8	231.7	231.7	4.30	0.83	30-Apr-03
NTS 1	27	186.10	177.38	8.7	179.3	178.6	178.6	2.10	0.40	30-Apr-03
NTS 2	27	197.38	187.02	10.4	189.6	188.6	188.6	2.70	0.52	30-Apr-03
NTW 1	27	188.99	178.38	10.6	181.4	180.1	180.1	3.20	0.62	30-Apr-03
NTW 2	28	190.86	178.37	12.5	181.4	180.3	180.3	3.50	0.66	30-Apr-03
NTW 3	26	198.51	186.57	11.9	189.8	188.4	188.4	3.60	0.71	30-Apr-03
NTW 4	27	186.48	174.32	12.2	178.0	177.0	177.0	3.60	0.69	30-Apr-03
NWP 1D	10	211.9	210.0	1.8	210.9	210.9	210.9	0.54	0.17	1-Apr-03
NWP 2D	10	200.6	199.4	1.2	200.1	200.2	200.2	0.43	0.14	1-Apr-03
NWP 3D	10	226.0	224.0	2.0	225.1	225.0	225.0	0.58	0.18	1-Apr-03
NWP101D	10	226.1	224.3	1.8	225.3	225.3	225.5	0.54	0.17	1-Apr-03
P 13D	82	248.81	219.71	29.1	233.2	232.9	233.4	6.40	0.71	7-Jan-03
P 15D	81	242.76	219.71	23.1	230.2	231.1	231.1	5.00	0.56	8-Jan-03
P 16D	93	221.91	207.55	14.4	215.7	215.6	215.6	3.50	0.36	15-Jan-03
P 17D	86	294.12	269.30	24.8	282.7	283.1	283.1	5.30	0.57	1-Jul-99
P 18D	88	229.94	213.45	16.5	222.9	223.7	223.7	4.30	0.46	8-Jan-03
P 19D	95	274.95	253.00	22.0	265.9	265.7	265.7	3.80	0.39	3-May-00
P 22D	79	192.15	177.55	14.6	182.9	182.5	182.5	3.00	0.34	4-Feb-03
P 23D	97	149.42	135.06	14.4	142.7	143.5	143.5	2.90	0.29	8-Jan-03
P 24D	92	277.81	257.59	20.2	270.4	271.0	271.3	3.50	0.36	6-Jan-03
P 25D	93	215.78	204.02	11.8	211.1	211.4	211.4	2.20	0.23	8-Jan-03
P 26D	57	126.1	109.6	16.5	117.4	117.4	117.4	3.44	0.45	21-May-03
P 29D	5	170.8	167.7	3.1	169.2	169.6	169.6	1.28	0.57	25-Oct-99

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
PAC 1	47	287.9	258.5	29.5	284.2	284.5	284.5	4.07	0.59	29-Nov-01
PAC 2	45	277.4	268.2	9.2	271.3	271.0	271.0	1.96	0.29	11-Jul-95
PAC 3	46	278.6	268.4	10.2	271.6	271.1	271.1	2.30	0.34	11-Jul-95
PAC 4	43	286.1	282.5	3.6	284.3	284.2	284.6	0.94	0.14	11-Jul-95
PAC 5	30	280.0	262.7	17.3	274.6	275.1	275.1	3.38	0.62	29-Nov-01
PAC 6	28	278.0	270.6	7.5	274.6	274.7	274.7	2.02	0.38	11-Jul-95
PBP 1D	7	291.6	271.7	20.0	280.6	280.3	280.4	5.85	2.21	29-Nov-01
PBP 2D	7	290.9	270.9	20.1	279.4	279.4	280.1	5.96	2.25	29-Nov-01
PBP 3D	7	291.4	271.3	20.1	280.2	279.9	280.0	5.89	2.23	29-Nov-01
PCB 1A	47	291.8	270.3	21.5	282.0	281.7	281.7	4.84	0.71	29-Nov-01
PCB 2A	47	290.7	266.2	24.5	280.6	280.7	280.7	4.83	0.71	29-Nov-01
PCB 3A	51	301.6	271.0	30.6	282.2	281.9	281.9	5.15	0.72	29-Nov-01
PCB 4A	46	289.7	274.9	14.9	281.3	281.3	281.3	3.42	0.50	25-Oct-99
PDB 2	45	281.7	270.3	11.3	278.0	278.2	279.2	2.61	0.39	29-Nov-01
PDB 3	45	281.9	270.4	11.4	278.3	278.6	279.5	2.58	0.38	29-Nov-01
PDB 4	14	281.7	270.3	11.4	278.5	278.5	278.5	2.74	0.73	29-Nov-01
PDB 5	15	279.8	269.5	10.2	277.1	277.6	277.6	2.44	0.63	29-Nov-01
PRP 1A	52	257.3	244.0	13.3	249.0	248.7	248.7	2.77	0.38	13-May-02
PRP 2	50	269.5	247.9	21.6	255.0	254.0	254.0	4.39	0.62	29-Nov-01
PRP 3	51	264.2	250.5	13.7	255.6	254.6	254.6	3.63	0.51	22-Nov-99
PRP 4	48	264.9	252.1	12.8	257.6	257.3	257.3	2.56	0.37	17-Jan-01
PRP 6	10	248.7	245.6	3.1	247.2	247.1	247.1	1.19	0.38	9-Apr-03
PRP 7	10	239.6	237.1	2.4	238.5	238.6	238.6	0.88	0.28	9-Apr-03
PSB 1A	57	285.0	265.0	20.0	276.5	277.0	277.0	3.56	0.47	29-Nov-01
PSB 2A	57	284.5	265.7	18.8	276.2	276.8	276.8	3.56	0.47	29-Nov-01
PSB 3A	57	283.7	264.0	19.8	274.9	275.6	275.6	3.98	0.53	29-Nov-01
PSB 4A	58	283.5	264.1	19.4	274.2	274.6	274.6	3.95	0.52	29-Nov-01
PSB 5A	58	285.1	268.1	17.0	275.8	276.1	276.1	3.57	0.47	29-Nov-01
PSB 6A	58	286.0	268.3	17.7	277.2	277.8	277.8	3.55	0.47	29-Nov-01
PSB 7A	59	285.6	265.7	19.9	276.9	277.6	277.6	3.71	0.48	29-Nov-01
PSS 1D	29	206.4	192.3	14.2	198.1	197.9	197.9	3.69	0.69	11-Jul-95
PSS 2D	28	204.2	190.6	13.6	195.3	194.9	194.9	3.53	0.67	11-Jul-95
PSS 3D	16	212.2	186.4	25.8	198.7	197.5	197.5	5.71	1.43	11-Jul-95

APPENDIX A
WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
RAC 1	53	276.3	253.9	22.4	271.7	273.3	273.3	6.14	0.84	29-May-03
RAC 2	48	273.8	251.2	22.7	271.4	272.3	272.3	4.48	0.65	14-Jul-00
RAC 3	49	274.1	200.8	73.3	269.6	272.0	272.0	11.09	1.58	14-Jul-00
RAC 4	46	273.7	245.4	28.3	269.2	271.6	272.0	7.35	1.08	14-Jul-00
RBP 1D	11	265.7	249.7	16.1	257.7	257.8	258.3	5.06	1.52	29-May-03
RBP 2D	11	267.7	250.4	17.3	259.5	260.0	260.6	5.48	1.65	29-May-03
RBP 3D	11	270.0	253.7	16.3	262.5	263.2	263.7	5.28	1.59	29-May-03
RBW 1D	3	259.5	258.1	1.4	259.0	259.4	259.4	0.78	0.45	29-Aug-96
RBW 2D	3	298.5	296.1	2.4	297.6	298.0	298.0	1.25	0.72	30-Aug-96
RCP 1D	14	285.0	271.5	13.6	280.3	281.6	281.7	4.25	1.14	29-May-03
RDB 1D	33	288.5	279.7	8.9	285.8	286.0	286.0	1.88	0.33	5-Jun-03
RDB 2D	34	287.6	279.5	8.0	284.9	285.2	285.2	1.87	0.32	5-Jun-03
RDB 3D	34	285.9	276.3	9.6	282.5	282.7	282.7	2.38	0.41	5-Jun-03
RPC 1D	6	276.9	270.9	6.1	275.6	276.6	276.6	2.37	0.97	28-May-03
RPC 1PW	2	274.3	271.2	3.1	272.7	272.7	272.7	2.21	1.56	28-May-03
RPC 1PZ	2	274.2	270.6	3.6	272.4	272.4	272.4	2.52	1.78	28-May-03
RPC 2D	6	280.9	272.2	8.7	273.9	272.5	272.5	3.46	1.41	29-May-03
RPC 2PR	3	274.0	270.5	3.5	272.6	273.2	273.4	1.84	1.06	28-May-03
RPC 3DU	7	290.6	273.2	17.3	283.7	285.8	285.8	7.13	2.69	2-Jun-03
RPC 5DU	12	278.3	264.5	13.8	271.6	272.7	272.7	5.97	1.72	2-Jun-03
RPC 6DU	8	296.8	269.5	27.2	281.1	278.1	278.1	9.87	3.49	2-Jun-03
RPC 7DU	9	276.3	264.4	11.9	268.4	266.9	266.9	4.32	1.44	2-Jun-03
RPC 8DU	9	291.7	275.5	16.2	280.4	276.5	276.5	6.18	2.06	3-Jun-03
RPC 9DU	7	281.5	270.1	11.4	275.9	278.1	278.1	4.82	1.82	3-Jun-03
RPC 10DU	8	290.5	275.5	15.0	283.3	285.1	285.1	7.10	2.51	3-Jun-03
RPC 11DU	12	289.5	275.7	13.8	281.9	279.1	279.1	5.99	1.73	3-Jun-03
RPC 13DU	7	274.0	265.1	8.9	268.2	267.3	267.6	3.27	1.23	3-Jun-03
RPC 14DU	11	282.4	274.8	7.5	279.0	279.8	280.6	2.71	0.82	3-Jun-03
RPC 15DU	4	274.3	261.6	12.7	270.7	273.5	274.1	6.09	3.04	17-Jun-03
RRP 1	53	273.7	248.6	25.1	264.9	265.1	265.1	5.48	0.75	29-May-03
RRP 2	47	270.8	249.6	21.2	264.1	264.0	264.0	4.19	0.61	9-Nov-01
RRP 3	54	270.8	245.7	25.1	263.8	263.6	263.6	4.76	0.65	29-May-03
RRP 4	48	271.5	246.7	24.9	263.4	263.2	263.2	4.43	0.64	8-Nov-01

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
RSA 7	28	300.4	275.2	25.2	288.3	291.0	291.1	8.18	1.55	4-Jun-03
RSA 9	31	296.7	273.2	23.5	283.4	282.7	282.7	7.15	1.28	4-Jun-03
RSA 10	29	292.3	272.8	19.5	281.2	281.3	281.3	5.10	0.95	5-Jun-03
RSB 7	33	294.6	279.3	15.3	286.0	285.0	285.0	4.63	0.81	4-Jun-03
RSC 2	25	284.6	270.5	14.2	277.9	277.0	277.0	3.58	0.72	28-May-03
RSC 3	26	283.3	267.5	15.8	276.1	276.8	276.8	4.68	0.92	29-May-03
RSC 4	29	291.3	270.7	20.6	280.0	279.1	279.1	6.37	1.18	28-May-03
RSC 5	30	284.4	266.2	18.2	273.5	272.2	272.2	5.12	0.93	31-Aug-00
RSC 6	29	296.1	273.9	22.2	285.2	288.1	288.1	8.04	1.49	23-Sep-99
RSC 7	28	293.1	267.7	25.4	281.0	281.7	281.7	8.06	1.52	29-May-03
RSC 8	31	303.2	283.8	19.4	293.6	291.8	291.8	6.70	1.20	3-Jun-03
RSC 9	26	279.3	226.3	53.0	269.7	270.8	270.8	9.51	1.87	28-May-03
RSC 10	31	277.9	253.4	24.5	270.5	271.1	271.1	5.23	0.94	28-May-03
RSD 1	44	291.4	280.3	11.1	286.6	287.4	287.4	3.35	0.51	5-Jun-03
RSD 3	44	292.1	276.8	15.3	287.0	287.1	287.1	3.81	0.57	5-Jun-03
RSD 4	37	292.8	276.4	16.5	287.4	289.6	289.6	4.77	0.78	6-Jun-03
RSD 5	34	292.7	275.7	17.0	286.6	286.9	286.9	4.44	0.76	6-Jun-03
RSD 6	34	292.7	276.0	16.7	286.5	287.2	287.2	4.17	0.71	6-Jun-03
RSD 7	46	288.9	274.4	14.4	284.6	285.3	285.3	3.58	0.53	6-Jun-03
RSD 8	46	289.4	275.4	14.0	284.9	285.7	285.7	3.56	0.52	3-Jun-03
RSE 1A	43	295.6	278.3	17.3	288.1	288.5	288.5	4.71	0.72	4-Jun-03
RSE 1B	30	296.3	273.3	23.0	289.0	289.3	289.3	5.32	0.97	9-Mar-95
RSE 1C	29	297.7	273.3	24.4	288.9	289.3	289.4	5.86	1.09	9-Mar-95
RSE 2	37	295.5	272.5	23.0	285.7	287.2	287.2	6.24	1.03	4-Jun-03
RSE 3A	49	291.0	271.0	20.0	284.7	286.0	286.0	4.16	0.59	4-Jun-03
RSE 7	55	295.8	273.0	22.8	280.3	281.3	281.3	4.91	0.66	6-Jun-03
RSE 8	47	294.6	274.0	20.6	283.5	282.2	282.2	6.71	0.98	5-Jun-03
RSE 9	32	294.1	273.5	20.6	279.7	278.4	278.4	4.75	0.84	5-Jun-03
RSE 10	30	292.7	274.0	18.7	281.6	281.3	281.3	5.64	1.03	3-Jun-03
RSE 10DU	5	284.0	269.2	14.8	277.0	281.1	281.9	7.00	3.13	16-Jun-03
RSE 12	13	281.2	273.8	7.4	276.8	276.0	276.7	2.09	0.58	11-Dec-90
RSE 18	28	287.1	274.1	13.0	279.7	278.6	278.6	3.78	0.71	5-Nov-94
RSE 19	28	293.8	274.2	19.6	281.1	278.7	278.7	5.87	1.11	5-Nov-94

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
RSE 26DU	5	283.6	272.9	10.7	277.2	273.4	273.4	5.66	2.53	11-Jun-03
RSP 1D	6	290.9	280.3	10.6	286.8	289.0	289.0	4.55	1.86	5-Jun-03
RSP 2D	1	280.8	280.8	0.0	280.8	280.8	280.8			13-May-98
RSP 3D	3	277.3	272.1	5.3	275.6	277.3	277.3	3.02	1.75	29-May-03
RSP 4D	9	285.2	270.8	14.4	279.7	279.8	279.8	4.36	1.45	5-Jun-03
RSP 5D	5	279.7	275.2	4.5	276.9	277.0	277.0	1.85	0.83	28-May-03
RSP 6D	6	271.1	264.1	7.0	268.7	269.3	269.3	2.39	0.98	28-May-03
RSP 7D	8	279.7	267.3	12.4	271.4	271.6	271.6	3.91	1.38	28-May-03
SBG 2	37	241.1	235.2	5.9	237.9	238.0	238.2	1.62	0.27	19-Oct-99
SBG 3	39	240.3	229.0	11.3	237.3	237.7	237.8	2.37	0.38	19-Oct-99
SBG 6	39	247.8	216.1	31.7	243.6	244.4	245.0	4.85	0.78	16-Jan-03
SCA 2	23	245.4	221.2	24.2	241.6	243.0	243.0	4.75	0.99	26-Oct-99
SCA 3	12	242.9	239.4	3.4	241.4	241.6	241.7	1.01	0.29	27-Oct-99
SCA 3A	18	274.6	267.3	7.3	270.9	271.1	271.1	1.95	0.46	27-Oct-99
SCA 4	19	244.3	237.6	6.8	241.7	241.9	242.0	1.51	0.35	27-Oct-99
SCA 6	19	244.7	239.8	4.9	242.2	241.9	242.0	1.14	0.26	27-Oct-99
SLP 1	31	249.1	242.2	6.9	245.4	245.8	245.8	1.95	0.35	19-Oct-99
SLP 2	31	248.2	228.6	19.5	244.4	245.3	246.0	3.37	0.61	19-Oct-99
SLW 1	7	175.8	167.6	8.2	172.3	174.6	174.6	3.41	1.29	21-Dec-92
SLW 2	7	192.0	180.1	11.9	187.0	190.4	190.4	5.42	2.05	21-Dec-92
SLW 3	6	197.1	185.3	11.7	191.1	191.0	191.2	5.03	2.05	20-Sep-92
SLW 4	6	202.0	193.0	9.0	197.5	197.5	198.4	3.77	1.54	20-Sep-92
SLW 5	7	197.4	191.4	6.1	194.4	196.0	196.1	2.68	1.01	21-Dec-92
SLW 6	7	203.8	196.9	6.9	200.5	202.4	202.8	3.12	1.18	21-Dec-92
SLW 7	7	176.5	168.9	7.6	172.9	175.5	175.6	3.58	1.35	21-Dec-92
SLW 8	7	196.9	192.3	4.5	194.4	195.5	195.5	1.84	0.70	21-Dec-92
SRW 1	69	227.6	168.9	58.6	211.7	213.0	213.0	7.32	0.88	11-Dec-01
SRW 2	77	218.4	204.4	14.0	214.0	214.6	214.6	2.83	0.19	23-May-03
SRW 4	82	269.4	198.8	70.6	215.0	214.5	214.5	7.37	0.81	23-May-03
SRW 5	80	220.2	202.7	17.5	211.9	211.9	211.9	3.37	0.38	27-Nov-00
SRW 6	85	243.0	203.4	39.7	212.4	212.4	212.4	4.58	0.50	2-Apr-03
SCA 6	19	244.7	239.8	4.9	242.2	241.9	242.0	1.14	0.26	27-Oct-99
SLP 1	31	249.1	242.2	6.9	245.4	245.8	245.8	1.95	0.35	19-Oct-99

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
SRW 7	74	219.8	201.4	18.4	211.2	211.2	211.2	3.14	0.21	27-May-03
SRW 8	84	216.8	198.0	18.8	208.4	209.1	209.1	3.89	0.42	23-May-03
SRW 9	100	208.6	166.6	42.0	197.9	199.6	199.9	5.91	0.59	23-May-03
SRW 11	72	219.4	205.2	14.2	211.0	211.0	211.0	2.98	0.35	20-Sep-99
SRW 12C	89	201.1	185.3	15.8	195.2	195.8	195.8	3.50	0.25	27-May-03
SRW 13C	85	214.8	197.8	17.0	209.0	209.8	209.8	3.03	0.21	2-Apr-03
SRW 15C	86	219.2	202.8	16.5	212.1	212.8	212.8	3.15	0.21	2-Apr-03
SRW 16C	101	222.7	204.1	18.6	214.3	215.2	215.2	3.81	0.26	23-May-03
SRW 19	13	216.9	210.2	6.7	214.4	214.6	214.6	2.34	0.65	28-May-03
TBG 1	66	102.9	95.7	7.2	99.4	99.5	99.5	2.08	0.21	28-May-03
TBG 3	68	106.7	95.9	10.8	101.4	101.9	101.9	3.09	0.37	21-May-03
TBG 4	60	107.2	94.6	12.6	102.4	102.3	102.3	2.14	0.28	28-May-03
TBG 5	57	107.8	97.9	9.9	101.7	101.3	101.3	2.43	0.32	27-May-03
TBG 6	60	106.3	97.1	9.2	101.7	101.8	101.8	2.24	0.29	21-May-03
TBG 7	55	110.1	98.0	12.1	104.8	104.9	104.9	2.57	0.35	2-May-03
TCM 2	28	91.6	87.3	4.3	88.4	88.2	88.2	0.95	0.18	21-May-03
TCM 3	22	93.6	89.9	3.7	91.0	90.8	91.4	0.79	0.17	23-May-03
TCM 4	4	92.2	91.4	0.8	91.7	91.6	91.6	0.38	0.19	3-Sep-02
TCM 5	14	94.1	91.4	2.8	92.2	92.1	92.1	0.70	0.19	23-May-03
TCM 6	4	92.5	91.5	1.0	92.0	91.9	91.9	0.41	0.20	12-Sep-02
TCM 7	16	94.9	92.1	2.9	93.0	92.9	92.9	0.67	0.17	23-May-03
TCM 8	4	92.0	91.0	1.0	91.4	91.4	91.4	0.41	0.21	12-Sep-02
TIR 1M	20	99.7	91.7	8.0	93.1	92.5	93.1	1.76	0.39	26-Nov-02
TIR 1U	21	95.0	91.5	3.5	92.7	92.6	92.6	0.81	0.18	26-Nov-02
TIR 2	26	94.4	90.9	3.5	91.9	91.7	92.3	0.78	0.15	21-May-03
TIR 3B	33	97.5	92.6	4.9	94.8	94.6	95.5	1.37	0.24	27-May-03
TNX 1D	52	100.9	95.3	5.5	98.8	99.4	99.4	1.46	0.20	5-May-03
TNX 2D	56	100.8	94.8	6.0	98.5	99.1	99.1	1.68	0.23	20-May-03
TNX 3D	68	101.8	94.8	7.0	98.6	99.5	99.5	2.18	0.26	27-May-03
TNX 4D	64	107.1	97.2	9.9	102.0	102.0	102.0	2.69	0.34	20-May-03
TNX 5D	61	110.2	98.4	11.9	103.9	103.6	103.6	2.88	0.37	2-May-03
TNX 6D	60	112.9	98.3	14.6	104.2	104.2	104.2	3.05	0.39	5-May-03
TNX 7D	62	103.0	96.5	6.5	100.4	100.8	100.8	1.71	0.22	20-May-03

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
TNX 8D	59	96.3	91.0	5.3	93.5	93.8	93.8	1.30	0.17	20-May-03
TNX 9D	61	96.2	91.1	5.1	93.4	93.4	93.4	1.19	0.15	2-May-03
TNX 10D	59	96.5	91.3	5.2	93.5	93.6	93.6	1.36	0.18	20-May-03
TNX 11D	60	96.4	85.4	11.0	93.4	93.6	93.7	1.64	0.21	21-May-03
TNX 12D	55	96.7	92.7	4.0	94.6	94.7	94.9	0.94	0.13	5-May-03
TNX 13D	17	95.2	90.9	4.3	92.5	91.7	91.9	1.46	0.35	5-Dec-02
TNX 14D	14	94.7	91.0	3.7	92.5	91.8	92.2	1.38	0.37	23-Feb-01
TNX 15D	22	97.2	81.1	16.0	93.1	92.2	92.7	3.70	0.79	4-Dec-02
TNX 16D	31	92.7	85.2	7.5	88.8	87.5	87.5	2.28	0.41	21-May-03
TNX 17D	16	93.7	88.2	5.5	91.0	90.2	90.2	1.76	0.44	23-Oct-02
TNX 18D	13	93.7	84.8	8.8	91.5	91.4	91.9	2.34	0.65	6-Dec-02
TNX 19D	14	94.6	90.6	4.1	92.0	91.4	91.9	1.34	0.36	2-Mar-01
TNX 20D	15	95.3	90.2	5.1	91.9	91.5	91.8	1.37	0.35	6-Dec-02
TNX 21D	17	92.9	89.8	3.1	91.6	91.7	91.9	0.84	0.20	24-Oct-02
TNX 22D	14	93.0	89.9	3.1	91.1	90.6	90.9	1.01	0.27	2-Mar-01
TNX 23D	27	101.5	94.9	6.6	97.3	96.3	96.3	2.05	0.39	20-May-03
TNX 24D	22	110.1	107.6	2.5	108.9	108.9	108.9	0.64	0.14	8-May-03
TNX 26D	36	96.1	90.6	5.5	92.9	92.7	93.0	1.44	0.24	21-May-03
TNX 27D	30	98.1	93.4	4.6	95.2	94.9	94.9	1.38	0.25	27-May-03
TNX 28D	8	93.3	90.5	2.8	91.2	91.0	91.0	0.87	0.31	6-Dec-02
TNX 29D	6	92.0	90.9	1.1	91.2	91.1	91.1	0.39	0.16	5-Mar-01
TNX 30D	12	94.3	91.4	2.9	92.3	92.3	92.3	0.78	0.22	22-May-03
TNX 31D	6	92.7	92.1	0.6	92.4	92.4	92.4	0.23	0.10	8-Feb-01
TNX 32D	6	92.6	91.7	1.0	92.2	92.2	92.2	0.32	0.13	8-Feb-01
TNX 33D	8	92.7	91.7	1.1	92.2	92.3	92.3	0.38	0.14	5-Dec-02
TNX 34D	6	93.5	91.6	1.9	92.4	92.3	92.3	0.65	0.27	5-Mar-01
TNX 35D	6	92.8	91.4	1.3	92.2	92.2	92.2	0.47	0.19	2-Mar-01
TNX 36D	6	92.8	91.3	1.5	92.2	92.2	92.2	0.52	0.21	2-Mar-01
TNX 37D	6	92.8	91.4	1.5	92.2	92.3	92.3	0.50	0.20	2-Mar-01
TRW 1	40	101.3	81.4	19.9	89.7	88.9	88.9	3.72	0.59	27-May-03
TRW 2	36	100.6	77.2	23.4	89.7	89.6	89.6	4.20	0.70	25-Feb-03
TRW 3	19	101.8	77.4	24.4	86.9	83.5	83.5	7.80	1.79	25-Feb-03
TRW 4	35	102.9	81.9	21.0	92.4	90.4	90.4	5.69	0.96	3-Dec-02

APPENDIX A

WSRC-TR-2003-00250. REVISION 0

WELL	Number	Max. Elev. (ft)	Min. Elev. (ft)	Range (ft)	Mean Elev. (ft)	Median Elev. (ft)	Adjusted Median	Stddev	Stderr	Date Last Sampled
XSB 1	17	104.6	101.2	3.4	102.3	101.9	101.9	1.08	0.26	15-Jun-88
XSB 1D	62	106.7	93.5	13.2	97.6	98.1	98.1	2.52	0.32	22-May-03
XSB 2	13	107.0	104.1	2.9	105.8	106.0	106.0	0.76	0.21	9-Nov-87
XSB 2D	68	105.9	93.4	12.6	97.5	97.5	97.5	2.31	0.28	22-May-03
XSB 4	17	100.6	97.6	3.0	99.2	99.1	99.1	0.98	0.24	2-Aug-88
XSB 4D	64	105.6	93.6	12.0	97.6	97.6	97.6	2.27	0.28	22-May-03
XSB 6	13	97.1	92.8	4.3	94.3	94.1	94.2	1.29	0.36	28-May-03
YSB 1A	69	126.4	101.4	25.0	117.3	119.1	119.1	6.48	0.78	23-Feb-01
YSB 2A	75	127.8	99.7	28.1	116.5	119.4	119.4	8.30	0.96	5-May-03
YSB 3A	70	136.0	112.0	24.0	119.8	119.2	119.2	3.38	0.40	16-Feb-01
YSB 4A	74	126.0	99.4	26.7	115.4	118.3	118.3	8.05	0.94	5-May-03
YSC 1D	3	221.6	220.8	0.8	221.2	221.1	221.1	0.40	0.23	20-Dec-92
YSC 2D	24	220.8	212.7	8.1	216.3	216.0	216.0	2.35	0.48	20-Oct-99
Z 1	1	218.6	218.6	0.0	218.6	218.6	218.7			18-Jun-86
Z 2	16	222.4	217.2	5.2	219.5	219.5	220.0	1.68	0.42	10-Mar-95
Z 3	10	217.0	210.4	6.6	212.7	212.3	212.8	1.83	0.58	10-Dec-91
Z 8	16	222.4	216.1	6.3	219.3	219.1	219.6	2.07	0.52	10-Mar-95
Z 9	28	219.0	212.0	6.9	215.1	214.9	214.9	2.11	0.40	2-Mar-95
Z 20	7	187.4	183.4	4.0	185.2	185.3	185.3	1.19	0.45	13-Mar-89
Z 20B	11	195.1	186.2	8.9	191.2	191.5	191.5	2.83	0.85	10-Mar-95
ZBG 1	50	282.6	220.3	62.3	234.3	234.2	234.2	7.94	1.12	17-Sep-02
ZBG 2	50	228.4	212.8	15.6	221.3	221.7	221.7	3.49	0.49	17-Sep-02
ZDT 1	41	242.4	238.2	4.2	239.8	239.7	239.7	0.91	0.14	9-Aug-01
ZDT 2	41	244.1	236.6	7.5	241.2	241.2	241.2	1.25	0.20	9-Aug-01
ZW 2	20	211.0	203.4	7.6	207.1	207.3	207.5	2.41	0.54	21-Mar-95
ZW 3	21	204.4	197.4	7.0	200.6	200.8	200.8	1.90	0.41	21-Mar-95
ZW 4	21	235.8	226.9	8.9	232.3	232.5	232.5	1.93	0.42	20-Mar-95
ZW 5	25	230.3	225.3	5.0	227.5	227.6	227.6	1.29	0.26	20-Mar-95
ZW 6	19	229.3	214.6	14.7	220.1	220.0	220.0	3.03	0.69	21-Mar-95
ZW 7	19	268.0	263.6	4.4	265.9	266.5	266.7	1.43	0.33	20-Mar-95
ZW 8	19	271.9	268.9	3.0	270.9	271.0	271.7	0.89	0.20	20-Mar-95
ZW 9	20	255.1	249.2	5.9	252.1	252.3	252.3	1.88	0.42	16-Mar-95
ZW 10	25	263.4	242.9	20.5	249.7	249.4	249.4	3.97	0.79	20-Mar-95

APPENDIX B
WELL CONSTRUCTION INFORMATION

This page intentionally left blank.

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
ABP 1DD	3686140.2	431186.8	360.1	357.9	227.2	207.2
ABP 2DD	3686144.9	431067.7	370.6	368.3	222.3	202.2
ABP 3	3686223.4	431154.8	353.8	351.9	236.9	206.9
ABP 4	3686074.3	431107.5	364.5	362.5	212.5	182.5
ABP 4DD	3686076.7	431107.8	365.0	362.7	223.2	203.2
ABP 6D	3686173.8	431037.1	365.3	363	222.4	202.4
ABP 7D	3686034.7	431073.8	364.2	361.9	225.2	205.2
ABP 8C	3686141.6	431010.6	372.3	369.8	190.6	185.5
ABP 8D	3686144.2	431014.5	371.1	368.8	228.2	208.1
ABP 9D	3685817.8	430889.5	353.4	351	232	212
ABP 10D	3686233.8	430731.5	353.7	351.4	226.85	206.95
AC 2B	3688505.5	430223.0	345.0	342.8	236.4	216.4
AC 3B	3686582.7	429990.3	302.8	300.1	213.4	193.4
ACB 1A	3688643.3	431979.0	359.7	357.6	247.6	217.6
ACB 2A	3688614.7	432071.9	350.0	347.8	237.8	207.8
ACB 3A	3688517.7	432049.1	349.5	346.3	236.3	206.3
ACB 4A	3688529.1	431966.5	359.1	356.7	241.7	211.7
AMB 1A	3689000.0	431744.3	378.7	376.9	246.9	216.9
AMB 2	3689049.7	431739.0	379.3	377	252	222
AMB 3A	3689031.2	431792.8	373.3	371.4	251.4	221.4
AMB 4	3689033.3	431736.7	380.6	378.6	242.8	222.8
AMB 4D	3689042.0	431733.6	380.3	378.4	233.4	213.4
AMB 5	3689020.6	431741.0	379.8	377.6	242.1	222.1
AMB 6	3689008.2	431749.6	377.4	375.1	242.6	222.6
AMB 7	3689008.6	431809.2	370.1	368.1	242.1	222.1
AMB 8D	3688957.2	431762.0	369.9	367.8	240.8	220.8
AMB 9D	3688861.2	431780.1	368.1	365.7	239.7	219.7
AMB 10D	3688823.9	431879.9	365.8	363.4	239.4	219.4
AMB 10DD	3688820.3	431882.6	365.7	363.6	358.6	338.6
AMB 11D	3688869.7	432026.2	364.3	362	240.5	220.5
AMB 12D	3688980.0	431934.3	370.1	367.8	239.4	219.4
AMB 14D	3689049.6	431679.8	382.7	380.1	235.1	215.1
AMB 15D	3689108.4	431645.7	383.7	381.2	236.2	216.2
AMB 16D	3689082.4	431730.0	380.7	378.4	233.4	213.4
AMP 1D	3688268.1	431810.0	347.2	344.34	232.34	222.34
AOB 1	3688309.3	431888.9	341.2	338.5	248.5	218.5
AOB 2	3688376.6	431930.0	345.6	343.2	250.2	220.2
AOB 3	3688456.7	431960.1	352.8	350.6	243.9	223.9
ARP 1A	3686511.4	430872.8	355.8	353	223	193
ARP 3	3686502.0	431100.7	340.7	338.2	218.2	188.2
ARP 3DR	3686516.0	431100.5	340.7	337.09	206.84	201.78
ARP 4	3686389.9	430982.9	349.3	346.8	227.8	197.8
ARP 5D	3686487.4	430943.6	352.8	349.83	229.83	209.83
ARP 8D	3686400.4	430883.9	355.8	352.79	224.79	204.79
ARP 9D	3686625.1	430929.2	347.5	344.85	224.85	204.85

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
ARP 10D	3686497.2	431146.6	336.3	333.79	228.79	208.79
ARP 11D	3686570.9	431117.3	336.6	334.58	223.81	204.33
ARP 16D	3686387.5	430931.9	354.7	351.81	214.51	204.51
ARP 19DR	3686495.7	430778.8	360.3	357.46	210.46	200.42
ARP 21C	3686454.3	430877.8	358.9	356	186	175.97
ARP 21D	3686449.6	430879.1	359.4	356.52	206.52	201.57
ASB 1A	3689583.8	431763.2	349.3	347.2	247.2	217.2
ASB 2A	3689645.6	431809.8	349.1	346.9	246.9	216.9
ASB 2AR	3689635.7	431826.4	355.8	353.1	240.1	220.2
ASB 3A	3689710.6	431874.0	345.2	342.9	247.9	217.9
ASB 3AR	3689690.9	431874.1	341.7	339.1	243.1	223.1
ASB 4	3689783.5	431830.1	335.9	333.1	256.1	226.1
ASB 5A	3689715.3	431762.4	345.2	342.9	247.9	217.9
ASB 5AR	3689717.0	431756.9	347.1	344.5	243.8	223.8
ASB 6	3689642.1	431746.9	350.4	348.4	243.9	223.9
ASB 6A	3689639.5	431746.0	350.4	348.2	248.2	218.2
ASB 7	3689644.1	431724.0	353.5	351.3	231.3	211.3
ASB 8	3689886.1	431740.2	349.1	346.6	226.6	206.6
ASB 9	3689639.9	432330.0	309.0	306.4	236.4	216.4
BG 26	3682915.9	438952.1	295.7	293.3	230.7	210.7
BG 27	3683014.1	438880.8	297.4	295.4	254.4	234.4
BG 28	3683111.5	438810.0	295.7	293.7	259.7	239.7
BG 29	3683209.9	438738.2	294.6	292.6	251.6	231.6
BG 30	3683307.9	438666.6	288.7	286.9	251.7	231.7
BG 31	3683405.4	438593.5	293.3	291.4	243.3	223.3
BG 32	3683503.9	438521.7	296.9	294.9	246.9	226.9
BG 33	3683486.2	438430.1	291.2	289.3	241.2	221.2
BG 34	3683414.5	438324.5	282.4	280.5	237.4	217.4
BG 35	3683346.6	438230.3	283.0	280.8	248	228
BG 36	3683389.7	438158.9	281.3	279.2	243.3	223.3
BG 37	3683337.6	438057.7	292.8	291.1	247.8	227.8
BG 38	3683265.9	437959.2	301.9	300.3	245.9	225.9
BG 39	3683194.2	437860.7	309.0	307	246	226
BG 40	3683122.5	437762.0	314.9	313.1	241.9	221.9
BG 41	3683033.4	437758.2	306.0	304	241	221
BG 42	3682935.6	437829.6	300.1	298.3	237.1	217.1
BG 43	3682885.7	437930.0	303.9	302.1	242.9	222.9
BG 51	3682855.0	438917.2	292.2	290.6	241.2	221.2
BG 52	3682807.6	437792.7	289.8	287.6	243.8	223.8
BG 53	3682787.7	437637.5	285.7	283.8	234.7	214.7
BG 54	3682665.3	437634.8	277.2	275.3	235.2	215.2
BG 55	3682545.3	437631.7	276.9	274.8	234.9	214.9
BG 56	3682447.3	437662.2	274.9	272.6	230.9	210.9
BG 57	3682457.1	437782.4	272.6	270.9	234.6	214.6
BG 58	3682466.9	437904.3	278.2	276.1	238.2	218.2

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
BG 59	3682480.3	438025.0	282.7	280.9	237.7	217.7
BG 60	3682490.6	438146.4	275.5	273.6	235.5	215.5
BG 61	3682505.6	438327.9	275.0	272.5	245	225
BG 63	3682517.9	438511.0	274.2	272.4	244.2	224.2
BG 64	3682528.2	438632.4	285.3	283.3	247.3	227.3
BG 65	3682538.3	438753.3	290.9	289.1	250.9	230.9
BG 66	3682643.7	438771.6	296.0	294.3	251	231
BG 67	3682752.2	438729.4	294.7	292.8	244.7	224.7
BG 68	3683455.1	438349.2	285.2	282.5	242.9	216.5
BG 69	3683450.6	438343.0	284.3	282.2	242.2	222.2
BG 71	3683459.0	438345.5	287.9	286.3	246.3	226.3
BG 72	3683462.9	438334.7	287.3	285.2	246	226
BG 73	3683470.3	438335.9	284.6	282.5	243	222.7
BG 74	3683469.0	438328.6	284.1	281.7	241.7	221.7
BG 75	3683464.5	438316.5	282.8	280.8	242.8	221.4
BG 76	3683518.8	438334.1	286.7	284.6	243	223
BG 77	3683513.8	438316.9	285.9	284	242.7	222.7
BG 78	3683521.9	438310.3	287.1	284.7	243.9	223.9
BG 79	3683529.1	438323.0	286.6	284.8	243.7	223.7
BG 80	3683413.9	438270.4	278.5	276.5	248.6	226.2
BG 81	3683423.8	438270.8	279.4	277	246.9	222.9
BG 84	3683437.1	438250.8	277.3	274.9	247.2	227.2
BG 85	3683438.0	438240.1	276.8	274.8	248	228
BG 86	3683447.7	438252.1	277.7	275.7	248	228
BG 87	3683449.5	438240.4	277.4	275.4	245.8	226.2
BG 89	3683552.2	438257.7	283.8	281.6	241.6	221.6
BG 90	3683548.3	438247.9	283.1	281.2	241.2	221.2
BG 91	3683531.9	437689.6	273.6	270.9	235.4	205.4
BG 92	3683807.4	437556.3	255.4	252.7	227.2	197.2
BG 93	3684091.5	437474.9	258.7	256	210.5	180.5
BG 94	3684381.9	437389.1	251.0	248.3	182.8	152.8
BG 96	3684163.7	437850.9	245.4	242.7	207.2	177.2
BG 98	3683559.5	437951.9	280.5	278.9	242.5	212.5
BG 99	3683569.0	438323.9	285.9	284.1	245.9	215.9
BG 100	3683882.2	438282.5	273.3	271.3	233.3	203.3
BG 101	3684177.9	438209.7	231.6	228.9	191.4	161.4
BG 103	3684051.9	438480.4	239.5	237	199.5	169.5
BG 104	3683868.1	438665.4	286.0	283.3	245.8	215.8
BG 107	3683359.1	439123.4	248.5	245.8	228.3	208.3
BG 108	3683203.1	439126.8	267.5	264.8	247.3	217.3
BG 109	3683054.4	439159.0	286.6	283.9	258.4	228.4
BG 110	3682851.0	439175.6	294.5	291.8	254.3	224.3
BG 113	3683869.6	438475.1	264.4	262.7	216.4	196.4
BG 115	3683550.3	438141.6	276.9	275	218.9	198.9
BG 119	3683524.8	437828.7	287.2	285.4	229.2	209.2

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
BG 122	3683692.5	437625.5	248.1	246	209.9	189.9
BG 124	3683420.3	437938.7	292.8	291.2	234.8	214.8
BGO 1D	3682856.1	438984.2	295.3	293	245	225
BGO 3D	3683259.0	438702.2	292.7	290.8	247.6	227.6
BGO 3DR	3683300.6	438676.0	291.8	289.3	237.6	217.5
BGO 4D	3683454.7	438557.6	297.5	295.6	240.6	220.6
BGO 5D	3683532.0	438494.3	296.3	294.2	239.3	219.3
BGO 6D	3683447.0	438372.4	285.7	283.2	237.2	217.2
BGO 7D	3683380.6	438277.5	287.2	285.2	240.2	220.2
BGO 8D	3683350.2	438186.8	288.0	285.6	240.6	220.6
BGO 9D	3683380.1	438112.6	285.3	283.2	229.2	209.2
BGO 10DR	3683305.8	438014.0	300.6	298.3	238.3	218.3
BGO 11D	3683230.1	437909.9	305.5	303.3	236.3	216.3
BGO 11DR	3683240.8	437901.8	305.5	302.9	233	213.1
BGO 12CX	3683159.1	437797.1	313.9	311.3	232.8	212.7
BGO 12D	3683154.8	437806.4	313.9	311.8	237.8	217.8
BGO 13DR	3683089.5	437706.6	319.5	317.3	220.3	210.3
BGO 14DR	3682956.6	437784.2	300.4	298.2	238.1	218.1
BGO 15D	3682883.2	437863.9	298.8	296.7	238.7	218.7
BGO 16D	3682890.0	437988.2	304.8	302.3	237.3	217.3
BGO 17D	3682888.0	438064.0	298.3	296	224	204
BGO 17DR	3682890.5	438065.2	299.4	296.9	236.9	216.9
BGO 18D	3682944.0	438140.8	295.1	292.6	239.6	219.6
BGO 20D	3682859.1	438354.3	283.7	281.3	236.3	216.3
BGO 21D	3682855.6	438491.4	285.6	283	237.7	217.7
BGO 22DR	3682866.9	438619.1	286.3	284.2	239.2	219.2
BGO 22DX	3682877.9	438588.2	286.1	283.35	237.85	217.85
BGO 23D	3682863.5	438735.3	289.4	287	242	222
BGO 24D	3682862.7	438851.1	293.4	291	241	221
BGO 26D	3682769.9	437628.3	285.7	283.5	233.5	213.4
BGO 27D	3682598.8	437626.6	276.6	274.3	229.3	209.3
BGO 28D	3682477.9	437630.8	277.7	275.1	230.1	210.1
BGO 29D	3682473.8	437498.7	265.6	263.5	228.5	208.5
BGO 30D	3682445.7	437669.8	275.0	272.8	227.8	207.8
BGO 31D	3682457.3	437790.5	273.9	271.6	231.1	211.1
BGO 32D	3682466.9	437937.4	281.9	279.5	234.5	214.5
BGO 33D	3682483.1	438093.4	280.5	278.1	233.1	213.1
BGO 34D	3682493.5	438231.8	275.1	272.7	232.7	212.7
BGO 35D	3682508.8	438399.3	273.8	271.4	239.4	219.4
BGO 36D	3682518.4	438517.2	275.7	273.3	243.3	223.3
BGO 37D	3682528.7	438662.3	287.5	285.1	246.1	226.1
BGO 38D	3682536.4	438756.5	291.8	289.3	242.3	222.3
BGO 39D	3682648.0	438778.3	295.9	293.7	244.7	224.7
BGO 44D	3683444.6	438228.2	285.6	283.4	233.4	223.4
BGO 45D	3682625.4	437571.5	278.8	276.6	229.6	209.6

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
BGO 49D	3682441.1	438313.8	271.7	269.5	238.5	218.5
BGO 50D	3682392.1	437599.5	256.2	254	228	208
BGO 51D	3682785.0	438689.7	289.6	287.1	240.1	220.1
BGO 52D	3682789.8	438437.8	284.8	282.1	239.4	219.4
BGX 1D	3683582.2	438391.3	291.4	289.2	234.7	214.7
BGX 3D	3683622.7	438049.6	291.4	289.1	221.6	201.6
BGX 4D	3683594.3	437846.4	291.1	288.8	223.8	203.8
BGX 5D	3683741.4	437785.5	285.2	283	215	195
BGX 6D	3683863.5	437778.1	277.2	275	211	191
BGX 7D	3683908.5	438042.3	279.4	277.1	214.1	194.1
BGX 8DR	3683834.3	438333.7	278.4	276.1	203.1	183.1
BGX 9D	3683777.2	438593.7	279.6	277.4	232.4	212.4
BGX 10D	3683635.4	438788.6	277.0	274.8	236.2	216.2
BGX 11D	3683385.0	438901.5	276.5	273.8	236.7	216.7
BGX 12D	3683182.4	439084.0	275.4	273.2	243.7	223.7
BRD 1	3673161.4	434922.4	205.9	203.9	178.9	148.9
BRD 2	3673233.0	434900.2	207.4	205.5	178.5	148.5
BRD 3	3673222.6	434976.3	220.6	218.5	188.5	158.5
BRD 4	3673200.2	434872.2	198.1	196.1	159.1	129.1
BRD 5D	3673180.4	434899.2	205.2	202.7	168.4	148.4
BRR 1D	3682280.8	436315.8	296.2	293.8	220.4	200.4
BRR 2D	3682246.6	436234.5	292.1	289.6	216.1	196.1
BRR 3D	3682220.0	436215.1	291.9	289.5	217.1	197.1
BRR 4D	3682192.9	436197.5	292.4	290	218.7	198.7
BRR 5D	3682152.7	436190.8	294.8	292.6	222.1	202.1
BRR 6D	3682298.0	436491.9	296.2	294.3	219.3	199.4
BRR 7D	3682349.4	436303.6	290.9	289.2	221.9	201.9
BRR 8DR	3682265.4	436159.0	280.1	277.4	219	204
BTP 6D	3686366.7	442319.5	309.4	306.9	230.9	220.9
BTP 9D	3686245.6	443087.8	294.9	292.8	227.8	217.8
CBR 1D	3678504.6	439899.2	300.8	298.5	250.9	230.9
CBR 2D	3678469.1	439876.7	301.2	298.8	253.8	233.8
CBR 3D	3678462.0	439856.7	302.0	299.6	254.1	234.1
CBR 4D	3678506.3	440005.7	295.8	293.4	253.3	233.2
CCB 1	3678697.4	437568.3	278.8	276.4	228.4	198.4
CCB 2	3678647.5	437568.2	270.6	268.6	228.6	198.6
CCB 3	3678638.5	437617.3	267.7	265.6	235.6	205.6
CCB 4	3678700.1	437638.4	283.0	281.2	241.2	211.2
CDB 1	3678974.9	436874.6	289.0	286.6	216.6	195.7
CDB 2	3678938.3	436875.7	288.8	286.1	216.1	195.1
CMP 8	3676860.6	441650.0	228.8	227	214	184
CMP 10	3676494.9	441816.0	311.1	308.8	218.8	188.8
CMP 10C	3676495.8	441810.8	312.1	309.6	189.6	179.6
CMP 10D	3676493.2	441812.6	311.7	309.3	229.6	209.6
CMP 11	3676451.7	441709.6	310.7	309.2	215.2	185.2

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
CMP 11D	3676449.5	441713.6	311.2	309.1	229.87	209.47
CMP 12	3676546.9	441594.4	283.1	281.6	223.6	193.6
CMP 13	3676600.2	441716.4	289.3	287.7	212.7	182.7
CMP 14C	3676480.8	441288.5	264.4	262.8	215.1	185.1
CMP 14CR	3676476.8	441290.2	267.0	263.49	196.49	186.49
CMP 14D	3676480.5	441292.4	266.0	263.7	224.5	204.1
CMP 14DU	3676476.0	441284.8	267.1	262.57	212.57	202.57
CMP 15C	3676290.7	441550.6	277.1	275.5	250.6	220.6
CMP 30D	3676429.5	441560.8	290.2	287.6	231.6	211.6
CMP 31C	3676606.5	441451.9	255.3	252.9	207.9	197.9
CMP 32C	3676707.8	441681.7	254.5	252.2	195.2	185.2
CMP 32D	3676707.9	441684.6	254.7	252.6	228.6	218.6
CMP 36D	3676854.1	441825.6	212.9	209.2	204.2	199.2
CMP 37D	3676902.7	441802.5	207.4	203.3	198.3	193.3
CMP 38D	3676907.1	441788.3	209.6	206.7	201.7	196.7
CMP 39D	3676934.7	441760.7	205.3	200.9	195.9	190.9
CMP 40D	3676908.2	441679.2	206.9	203.13	197.13	192.13
CMP 41D	3676874.5	441491.1	204.0	201.7	196.7	191.7
CMP 42D	3676796.7	441395.5	205.0	201.6	197.6	192.6
CMP 43D	3676811.5	441381.1	198.4	194.8	192.8	187.8
CMP 44D	3676542.5	441600.5	285.2	282.66	214.06	204.06
CMP 45D	3676571.1	441625.2	285.5	282.94	205.84	195.84
CMP 46D	3676572.7	441661.0	291.7	289.24	208.44	198.44
CMP 47D	3676579.7	441691.7	292.8	290.47	206.37	196.37
CMP 48D	3676636.5	441650.6	275.1	272.63	208.83	198.83
CMP 49D	3676627.1	441749.8	281.9	279.44	226.54	216.54
CMP 50D	3676614.4	441808.4	283.1	280.79	212.99	202.99
CMP 52BU	3676549.5	441711.9	313.7	310.91	190.91	180.91
CMP 52C	3676549.5	441708.4	313.7	310.69	209.69	204.69
CMP 53C	3676675.8	441765.7	269.5	266.59	207.59	197.59
CMP 54C	3676698.8	441601.2	264.4	261.34	188.34	178.34
CMP 55C	3676809.5	441498.1	225.5	222.62	187.62	177.62
CRP 1	3679011.1	436353.2	274.8	272.8	217.8	187.8
CRP 2	3679109.5	436268.1	278.9	276.8	201.8	171.8
CRP 3	3678956.3	436253.2	265.9	264	214	184
CRP 3D	3678965.4	436251.1	267.7	265.3	214.3	194.3
CRP 4	3678920.6	436317.0	267.9	265.7	210.7	180.7
CRP 5D	3679019.8	436400.7	276.9	274.6	214.6	194.6
CRP 6DR	3678872.1	436320.7	263.9	261.5	214.2	194.2
CRP 7D	3679101.7	436177.8	265.3	263	208	188
CRP 8D	3678895.4	436177.2	248.7	246	211	191
CRP 9D	3679120.8	436224.8	270.7	268.4	211.4	191.4
CRP 10D	3678992.4	436129.6	267.5	264.84	209.51	189.54
CRP 11D	3678997.5	436284.8	271.6	268.93	203.64	193.65
CRP 16DU	3679004.3	436209.5	270.9	268.16	207.19	197.19

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
CRP 17DU	3678981.7	436169.3	265.6	263.63	207.64	197.64
CRP 18D	3678981.6	436018.2	258.4	256.07	200.84	190.81
CRP 19D	3678964.2	435735.7	220.3	217.83	192.85	182.83
CRP 21	3678876.0	435276.0	172.7	170.31	155.31	145.31
CRP 22CU	3678935.0	435398.0	204.1	201.82	181.82	171.82
CRP 23DU	3678983.0	436241.1	268.3	266.58	196.48	190.78
CRP 24DU	3678986.6	436253.4	269.7	268.03	190.44	187.74
CRP 25DU	3678988.5	436253.8	269.9	268.15	193.83	191.13
CRP 26DU	3678990.8	436254.1	269.6	268.06	191.36	188.56
CRP 27DU	3678979.1	436277.0	275.0	273.3	196.15	193.45
CRP 28DU	3678979.9	436276.8	274.9	273.3	205.02	199.32
CRP 40A	3678916.2	435805.9	201.4	199.47	191.45	189.45
CRP 40B	3678916.2	435805.9	203.4	199.47	188.45	186.45
CRP 41A	3678885.4	435690.0	196.8	194.94	186.87	184.88
CRP 41B	3678885.4	435690.0	195.1	194.94	185.17	183.18
CRP 42A	3678924.9	435568.2	188.1	186.47	183.15	181.14
CRP 42B	3678924.9	435568.2	191.0	186.47	181.04	178.04
CRP 43A	3678919.4	435478.7	180.8	180.58	175.8	173.81
CRP 43B	3678919.4	435478.7	183.4	180.58	173.42	171.44
CRP 44A	3678858.8	435285.0	168.5	166.36	163.51	161.52
CRP 44B	3678858.8	435285.0	171.2	166.36	161.24	159.35
CRP 45A	3678907.4	435809.6	201.8	197.8	193.47	191.97
CRP 45B	3678907.4	435809.6	198.3	197.8	189.97	188.47
CRP 46A	3678865.9	435694.4	192.5	189.48	186.28	184.98
CRP 46B	3678865.9	435694.4	190.9	189.48	183.28	181.98
CRP 47A	3678875.0	435566.0	185.4	182.44	179.24	177.94
CRP 47B	3678875.0	435566.0	183.6	182.44	177.44	176.14
CRP 48A	3678894.9	435486.4	179.2	175.48	170.9	169.4
CRP 48B	3678894.9	435486.4	179.1	175.48	169.78	168.48
CRP 49A	3678851.0	435285.2	169.3	164.26	161.01	159.51
CRP 49B	3678851.0	435285.2	167.3	164.26	158.93	157.43
CRP 50A	3678829.0	435179.7	166.5	163.3	160.3	159
CRP 50B	3678829.0	435179.7	164.8	163.3	158.6	157.3
CRP 51A	3678938.1	435206.6	165.0	161.68	158.78	157.48
CRP 51B	3678938.1	435206.6	163.7	161.68	157.48	156.18
CRP 52A	3679145.7	435260.8	168.6	162.88	160.3	157.8
CRP 52B	3679145.7	435260.8	164.7	162.88	158.58	157.28
CSA 1	3678376.0	439003.4	290.9	289	262	232
CSA 2	3678368.4	439017.1	290.2	288.2	248.2	218.2
CSA 3	3678350.0	439013.4	289.5	287.6	248.6	218.6
CSA 4	3678357.9	438992.3	290.5	288.4	248.4	218.4
CSB 1A	3678866.6	436685.2	292.0	289.9	224.9	194.9
CSB 2A	3678766.2	436693.7	284.8	282.6	222.6	192.6
CSB 3A	3678757.1	436642.2	285.1	283	223	193
CSB 4A	3678795.2	436603.2	285.2	283	218	188

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
CSB 5A	3678842.0	436569.3	283.0	280.9	215.9	185.9
CSB 6A	3678900.9	436618.7	286.9	284.8	219.8	189.8
CSB 7D	3678786.4	436831.4	287.4	284.66	211.66	191.66
CSB 8D	3678791.1	436566.9	280.0	277.36	195.36	185.37
CSB 9D	3678739.9	436608.0	279.2	276.42	211.42	196.42
CSB 12D	3678393.2	435156.3	171.9	166.9	149.4	139.4
CSD 1D	3678727.8	438737.3	315.4	313.4	273.4	238.4
CSD 2D	3678691.1	438754.1	311.1	308.8	258.8	233.8
CSD 4D	3678680.2	438729.9	308.7	306.5	263.5	213.5
CSD 8D	3678664.9	438682.4	304.1	301.8	256.8	226.8
CSD 9D	3678625.2	438687.0	298.4	296.2	256.2	226.2
CSD 10D	3678622.7	438676.7	296.9	294.5	254.5	224.5
CSD 11D	3678581.1	438690.9	293.3	290.9	250.9	220.9
CSD 12D	3678624.1	438724.9	301.8	299.5	254.5	224.5
CSD 13D	3678549.0	438677.1	289.6	287.4	252.4	202.4
CSF 1D	3678376.7	438714.3	295.7	293.2	248.2	228.2
CSF 2D	3678312.6	439307.3	291.7	289.2	255.2	235.2
CSL 21D	3678220.5	439031.7	284.5	281.98	237.87	227.87
CSL 22D	3678212.3	439002.1	285.2	282.77	237.75	227.76
CSL 23D	3678192.0	439005.6	284.7	282.28	237.47	227.49
CSL 24D	3678193.8	439033.3	284.7	282.44	237.11	227.14
CSL 25D	3678241.9	439020.3	285.8	283.08	243.16	233.18
CSL 26D	3678231.5	439046.4	285.2	282.32	243.51	233.53
CSL 27D	3678241.9	439001.5	286.8	283.88	246.66	236.68
CSO 1	3678604.5	439699.1	304.0	302	262	232
CSR 1	3679485.2	439178.6	274.2	272.2	267.2	237.2
CSR 2	3679693.3	439298.8	297.8	295.5	285.5	255.5
CSR 3	3679764.0	439136.1	285.7	283.1	268.1	238.1
CSR 4	3679558.7	439279.7	284.8	282.6	267.6	237.6
CSR 5D	3679577.6	439077.7	273.5	271.08	253.08	233.08
CSR 8DU	3679494.5	438918.4	274.3	272.05	251.05	231.05
CSR 9DU	3679363.0	438549.6	287.8	284.13	257.13	247.13
CSR 10DU	3679429.4	438481.3	281.0	278.01	246.01	236.01
DA 11C	3672659.2	430905.8	129.8	127.1	97.1	77.1
DA 12C	3672719.6	430862.9	128.8	126.1	96.1	76.1
DB 6C	3672798.6	431144.4	115.6	113.1	98.1	88.1
DB 10C	3672632.4	430920.4	112.0	109.4	94.4	84.4
DB 15C	3672912.9	430691.9	115.4	112.9	97.9	87.9
DBP 1	3673925.8	430364.8	135.5	133.2	123.2	93.2
DBP 2	3673827.7	430340.4	126.5	124.3	114.3	84.3
DBP 3	3673904.5	430292.0	128.5	126.4	116.4	86.4
DBP 4	3673865.6	430288.2	127.2	124.02	114.02	84.02
DBP 5	3673865.0	430387.8	135.2	132.6	116.1	96.1
DCB 1A	3673484.0	431136.6	127.3	125.1	120.1	90.1
DCB 2A	3673524.4	431498.8	134.5	132.4	127.4	97.4

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
DCB 3A	3673337.7	431636.5	133.2	131.2	126.2	96.2
DCB 4A	3673265.9	431535.7	129.6	127.5	122.5	92.5
DCB 5A	3673312.6	431368.3	123.1	120.9	115.9	85.9
DCB 6	3673540.4	431141.9	133.8	131.5	129.5	109.5
DCB 7	3673509.6	431185.8	133.2	130.9	128.9	108.9
DCB 8	3673555.1	431521.3	137.2	134.8	130.3	110.3
DCB 9	3673515.2	431095.5	122.6	120.2	117.3	97.3
DCB 10	3673427.8	431176.1	124.4	121.8	119.8	99.8
DCB 11	3673525.3	430877.6	131.1	128.8	126.8	106.8
DCB 12	3673522.2	430608.7	117.2	115	112	92
DCB 13	3673326.9	431017.0	130.0	127.8	122.1	102
DCB 14	3673618.0	430864.3	129.4	127.5	114.6	94.6
DCB 15	3673228.5	430485.8	128.1	125.4	119.9	99.8
DCB 16	3673063.6	430596.6	128.1	125.9	120.1	100.1
DCB 17A	3673618.1	431033.6	129.2	127.4	119.4	109.4
DCB 18A	3673494.3	431138.6	127.0	124.81	119.81	109.81
DCB 19A	3673488.6	431146.2	128.4	126.4	121.9	111.9
DCB 20A	3673504.9	431215.8	132.6	130.9	120.9	110.9
DCB 21A	3673455.7	431156.6	128.2	126.6	120.1	110.1
DCB 21B	3673456.5	431154.9	128.2	126.7	104.7	102.2
DCB 22A	3673443.1	431143.0	127.2	125.3	119.8	109.8
DCB 23A	3673400.6	431103.9	121.1	119.2	115.7	105.7
DCB 24A	3673332.6	431294.6	124.2	122.2	119.2	109.2
DCB 26AR	3673705.5	430790.5	125.7	122.7	111.7	97.4
DCB 27	3673474.1	430379.0	114.7	111.9	101.8	91.8
DCB 28	3673314.0	430162.7	103.0	100	92.1	82.09
DCB 29R	3673084.4	430409.6	111.5	108.1	90.1	80.74
DCB 30	3672675.5	430699.1	113.8	111.1	101.2	91.2
DCB 32A	3674027.4	430490.6	144.2	141.3	121.7	111.7
DCB 34A	3673255.5	431473.1	130.9	128	112	102
DCB 36A	3673348.2	431236.6	126.8	123.9	114.1	104.1
DCB 37A	3673579.3	431055.2	129.4	126.5	110.8	100.8
DCB 39A	3673606.9	430940.0	131.3	128.3	114.3	104.3
DCB 40A	3673786.6	430726.3	132.3	129.3	115.5	105.5
DCB 43A	3673691.3	430999.2	135.0	131.6	113.6	104.28
DCB 44A	3673846.6	431108.1	137.8	134.6	123.3	108.3
DCB 45A	3673926.5	431028.5	137.9	134.9	125.2	110.2
DCB 49	3673364.9	431282.8	124.5	122	118.65	106.15
DCB 50	3673362.3	431281.0	124.3	122	118.46	105.9
DCB 51A	3674403.7	431799.1	160.8	157.69	138.32	128.28
DCB 57A	3673887.2	430539.3	130.2	127.22	107.22	97.22
DCB 59A	3674002.6	430550.9	136.9	133.95	113.95	103.95
DCB 61	3674316.3	430385.6	139.1	136.14	118.34	108.3
DCB 63	3674186.6	431236.2	143.7	140.54	132.54	117.44
DCB 64	3674224.0	431178.2	142.6	139.5	128.65	118.62

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
DCB 65A	3673688.9	430211.3	115.9	112.74	103.98	93.95
DCB 70A	3673428.5	431125.9	119.2	116.49	114.69	104.69
DCB 71A	3673468.8	431105.5	118.5	116.23	114.23	104.23
DOB 1	3675235.9	431260.1	151.7	150.15	145.15	115.15
DOB 2	3675227.3	431180.9	152.5	150.57	145.57	115.57
DOB 3	3675310.6	431230.4	153.0	151.1	146.1	116.1
DOB 4	3675299.1	431307.5	153.9	151.87	139.87	109.87
DOB 5	3675335.4	431295.3	154.6	151.9	148.9	129
DOB 6	3675273.8	431156.7	150.8	148.55	145.55	125.55
DOB 7	3675191.1	431261.8	151.3	148.99	145.99	125.99
DOB 8	3675259.4	431296.8	153.9	151.62	148.62	128.62
DOB 9	3675350.0	431223.6	154.1	151.55	148.55	128.55
DOB 10	3675199.4	431182.5	153.9	151.67	148.67	128.67
DOB 12	3675207.8	431217.8	152.8	150.46	138.8	133.76
DOB 14	3675203.3	431268.7	152.5	149.29	137.63	132.59
DOB 15A	3675098.4	431216.9	149.7	147.25	129.75	119.79
DOB 19A	3674931.0	431164.7	146.6	144.15	129.47	119.48
DOB 20A	3674770.8	431106.0	149.6	146.99	129.49	119.49
DOB 21A	3674777.3	431125.5	149.0	146.38	128.88	118.88
DOB 22A	3674759.9	431156.9	147.5	144.96	127.46	117.46
DWP 1	3673357.0	429914.4	103.2	98.17	93.27	88.27
DWP 2	3673072.1	429978.5	99.8	95.99	90.99	85.99
DWP 3	3673153.9	429818.3	100.4	95.98	93.08	88.08
DWP 4	3673131.5	430234.6	103.1	98.99	94.79	89.79
DWP 5	3672969.1	430270.4	104.4	100.06	95.06	92.06
DWP 6	3672814.5	430303.7	101.8	97.17	91.67	89.17
DWP 7	3673206.6	430107.7	101.4	97.29	92.98	88
DWP 8	3672924.4	430071.8	100.3	96.14	92.14	87.15
DWP 9	3672992.7	429886.1	99.8	95.83	91.85	86.86
DWP 10	3672840.5	429950.9	94.0	91.61	84.12	79.12
DWP 11	3672714.9	430051.7	95.2	92.9	85.22	80.23
F 2	3682025.7	436839.3	281.4	280.2	217	207
F 9	3681713.2	436752.8	269.3	268.3	212.8	202.8
F 10	3681710.6	436676.7	280.1	277.5	276.5	266.5
F 18A	3681407.6	436770.5	233.4	231.4	204.4	194.4
FAB 1	3683163.6	437304.1	327.4	325.4	235.4	215.4
FAB 2	3683122.5	437417.7	328.5	326.5	236.5	216.5
FAB 3	3683024.8	437448.6	323.8	321.8	231.8	211.8
FAB 4	3683082.9	437304.1	326.3	324.2	234.2	214.2
FAC 1	3683322.4	437335.3	312.2	310.2	255.2	225.2
FAC 2	3683283.1	437341.1	313.7	311.8	256.8	226.8
FAC 3	3683290.7	437365.1	311.8	309.8	254.8	224.8
FAC 4	3683368.3	437365.2	310.0	307.8	237.8	207.8
FAC 5	3683261.9	437355.4	315.8	314	234	214
FAC 5P	3683328.1	437334.9	313.0	310.9	235.7	225.7

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
FAC 6	3683320.3	437348.4	312.5	310.8	236.2	216.2
FAC 7	3683322.6	437354.5	312.0	310.3	235.7	215.7
FAC 8	3683316.4	437362.7	311.0	309	236	216
FAC 10C	3683311.4	437340.9	312.8	310.2	210.2	200.2
FAC 11C	3683294.7	437328.0	314.0	311.4	211.4	201.4
FAC 12C	3683280.6	437336.1	314.4	312	208	198
FAL 1	3683033.9	436961.7	313.0	310.5	238.5	207
FAL 2	3683062.7	436941.1	312.3	310	238	206.6
FBP 5D	3682818.4	436107.6	292.6	290.1	212.6	192.6
FBP 6D	3682841.9	435891.9	289.9	287.3	198.3	178.3
FBP 7D	3682934.2	435949.8	294.7	292.2	203.2	183.2
FBP 9D	3682909.9	436041.0	284.4	281.9	197.9	177.9
FBP 10D	3682755.4	435950.6	286.3	283.8	200.8	180.8
FBP 11D	3682740.2	436049.1	289.8	287.3	212.1	192
FBP 12D	3682770.4	436177.1	290.6	288.1	202.1	182.1
FBP 13D	3682887.0	435914.4	298.4	295.7	192.7	172.7
FBP 43DU	3682873.2	436416.3	253.8	251.26	239.26	224.47
FBP 44D	3682837.3	435543.6	184.8	182.62	168.62	163.62
FBP 45D	3682915.4	435561.2	172.4	170.41	165.61	160.61
FBP 46D	3682937.5	435593.6	181.6	179.45	166.45	161.45
FBP 47D	3683017.2	435606.3	179.2	176.87	170.77	165.77
FBP 48D	3683105.4	435580.3	185.5	183.29	175.49	170.49
FC 1D	3683306.1	436521.6	319.1	317.2	222.2	217.2
FC 3F	3683885.6	437814.2	270.2	268.1	210.1	205.1
FC 4D	3684083.0	436256.2	241.4	239.4	151.4	146.4
FC 4E	3684085.5	436256.1	241.5	239.4	181.4	176.4
FCA 19D	3683065.6	436924.5	311.8	309.7	229.7	209.7
FCB 1	3682918.5	437466.1	307.9	305.6	235.6	205.6
FCB 2	3682911.5	437537.1	307.5	305.2	235.2	205.2
FCB 3	3682818.5	437539.8	304.5	300.3	225.3	195.3
FCB 4	3682857.2	437410.5	306.8	304.5	234.5	204.5
FCB 5	3682816.3	437503.2	304.1	301.7	237.1	217.1
FCB 6	3682831.2	437477.4	310.7	308.4	235.1	215.1
FCB 7	3682953.1	437473.0	315.6	313.1	238.3	218.3
FET 1D	3682471.6	437199.0	270.2	268	226.9	206.9
FET 2D	3682384.9	437142.0	270.2	267.9	229.5	209.5
FET 3D	3682372.0	437168.1	285.5	283.2	223	203
FET 4D	3682393.7	437198.8	287.1	284.7	225.1	205.1
FNB 1	3683627.8	436723.6	284.6	282.2	207.2	177.2
FNB 2	3683715.6	436693.7	288.2	285.8	210.8	180.8
FNB 3	3683697.0	436610.7	284.2	282.1	212.1	182.1
FNB 4	3683614.6	436571.8	291.6	289.6	209.6	179.6
FNB 5	3683731.7	436656.8	287.7	285.5	203.5	193.5
FNB 6	3683761.6	436560.0	280.1	277.57	210.57	200.57
FNB 7	3683773.1	436665.6	291.9	289.37	202.37	192.37

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
FNB 8	3683768.9	436725.9	289.9	287.41	205.41	195.41
FNB 10	3683866.0	436621.9	243.3	240.2	200.2	170.2
FNB 11	3683847.0	436761.3	294.2	291.19	191.19	161.19
FNB 12	3684000.2	436559.9	202.2	199.55	194.55	164.55
FNB 13	3684086.8	436618.8	215.0	212.24	197.24	167.24
FNB 14	3684090.7	436675.4	233.3	230.49	202.49	172.49
FOB 1D	3681304.9	436814.6	225.9	223.36	195.36	175.36
FOB 2D	3681255.1	436662.7	229.0	226.5	195.5	175.5
FOB 3D	3681215.9	436523.4	227.4	224.86	203.36	183.36
FOB 7D	3681903.8	436460.6	298.4	295.85	213.85	193.85
FOB 8D	3681772.2	436441.9	288.9	286.37	211.37	191.4
FOB 9D	3681924.0	436648.8	295.1	292.63	212.63	192.63
FOB 10D	3681943.7	436735.2	288.2	285.66	215.46	195.62
FOB 11D	3682083.5	436957.3	263.5	260.96	218.96	198.96
FRB 1	3682597.6	437339.0	279.7	277.5	232.17	212.17
FRB 2	3682546.3	437257.8	274.4	272.3	228.6	213.6
FRB 3	3682511.4	437278.6	272.2	269.9	231.23	216.23
FRB 4	3682512.9	437302.1	271.1	269	229.63	214.63
FSB 0PD	3681454.7	436638.9	254.9	252.6	215.3	171.6
FSB 25PD	3681447.7	436637.2	254.6	252.3	216.4	171.3
FSB 50PD	3681471.8	436635.7	258.0	255.7	219.8	174.7
FSB 76	3682122.9	436732.5	294.4	292	227	197
FSB 77	3681752.4	436747.5	273.4	271.4	216.4	186.4
FSB 78	3681564.1	436678.0	272.7	270.7	217.7	187.7
FSB 79	3681288.4	436869.2	218.0	216.1	204.1	174.1
FSB 87D	3681751.6	436509.9	287.6	285.3	216.8	187.4
FSB 88D	3682019.7	436859.7	282.5	280.1	222.1	202.1
FSB 89D	3681967.3	436825.8	281.6	278.9	221.9	201.9
FSB 90D	3681890.1	436808.5	279.1	276.1	225.1	205.1
FSB 91D	3681813.6	436791.0	279.7	276.9	220.9	200.9
FSB 92D	3681703.9	436724.2	276.4	273.7	221.7	201.7
FSB 93D	3681646.3	436726.5	276.6	273.9	217.9	197.9
FSB 94DR	3681589.6	436658.7	281.3	278.4	203.4	183.3
FSB 95DR	3681589.9	436595.6	284.4	282	207	187
FSB 97D	3681634.8	436555.2	286.2	283.9	216.9	196.9
FSB 98D	3681704.3	436555.9	284.6	282.3	220.3	200.3
FSB 99D	3681821.7	436551.6	287.8	285.1	218.1	198.1
FSB100PD	3681458.4	436663.1	252.9	250.6	215.2	175.1
FSB104D	3681179.6	436615.1	219.4	216.9	210.4	190.4
FSB105DR	3681627.7	436509.6	286.3	283.6	208.6	188.5
FSB106D	3681508.0	436896.7	235.2	232.9	222.9	202.9
FSB107D	3681842.5	436846.5	271.2	268.7	220.9	200.9
FSB108D	3682108.1	436650.4	298.2	295.8	223.8	203.8
FSB109D	3681891.1	436561.9	293.3	290.8	225.8	205.8
FSB110D	3681419.3	436774.6	234.7	232.6	211.1	191.1

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
FSB111D	3681958.8	436899.9	276.8	274.4	221.7	201.7
FSB112D	3681182.6	436433.7	230.4	227.6	208.9	188.9
FSB113D	3681581.4	437017.2	222.6	220.6	209.6	189.6
FSB114D	3682023.3	437042.4	252.4	250.2	217.8	197.7
FSB115D	3680929.1	436975.7	208.7	206.5	192.5	182.5
FSB116D	3681145.7	437157.7	203.1	200.9	196.4	186.4
FSB117D	3681450.9	436881.7	230.9	228.7	209.7	189.7
FSB118D	3681747.1	436963.7	243.4	241.3	211.3	191.3
FSB119D	3681601.7	436814.8	254.3	252.1	213.1	193.1
FSB120D	3681582.8	436287.1	280.8	278.5	216.5	196.5
FSB121DR	3681348.5	436181.0	255.7	253.3	211.3	191.3
FSB122D	3680990.7	436355.5	217.8	215.6	206.6	186.6
FSB123D	3681796.0	437100.9	238.3	236.1	214.1	194.1
FSB150PD	3681447.4	436594.5	259.4	257.2	221.3	176.2
FSL 1D	3683130.3	436603.6	311.6	308.6	228.6	208.5
FSL 2D	3682989.0	436630.4	306.5	303.8	228.8	208.7
FSL 3D	3682716.0	436706.5	302.7	300	226	205.9
FSL 4D	3682596.8	436704.7	294.8	292.1	224.1	204
FSL 5D	3682438.4	436696.7	292.4	289.7	223.7	203.5
FSL 6D	3682329.5	436709.9	286.8	284.1	222.1	202.1
FSL 7D	3682186.2	436722.9	287.6	285.6	219.6	199.5
FSL 8D	3682123.9	436778.8	290.8	288.8	222.8	202.7
FSL 9D	3682058.8	436837.6	286.6	283.5	221.5	201.4
FSL 10C	3682891.0	436515.2	266.6	263.98	198.98	178.98
FSS 1D	3682355.1	437509.1	266.3	263.9	229.9	209.9
FSS 2D	3682320.9	437541.9	261.8	259.4	224.4	204.4
FSS 3D	3682219.2	437476.2	258.4	255.8	225.8	205.8
FSS 4D	3682240.9	437207.2	292.0	289.8	222.6	202.6
FST 1D	3682969.5	435254.4	134.1	132	129.5	119.5
FTF 1	3682757.4	436945.6	283.1	281.2	241.2	221.2
FTF 2	3682755.5	436983.0	281.3	279.4	239.4	219.4
FTF 3	3682725.2	436993.6	280.0	278.2	221.2	218.2
FTF 4	3682704.2	437017.7	278.5	276.6	236.6	216.6
FTF 5	3682662.3	437010.5	277.3	275.3	235.3	215.3
FTF 7	3682697.5	436955.3	280.0	278.1	226.1	222.1
FTF 8	3682716.9	436929.9	281.5	279.6	239.6	219.6
FTF 9	3682701.0	436832.1	271.9	270.4	236.4	216.4
FTF 10	3682689.1	436891.8	271.1	269.1	235.1	215.1
FTF 11	3682622.8	436881.2	271.2	269.8	235.8	215.8
FTF 12	3682639.5	436831.2	271.7	269	235	215
FTF 13	3682551.8	437064.7	285.8	284.1	236.1	216.1
FTF 14	3682263.5	436901.1	270.7	268.6	238.6	218.6
FTF 15	3682598.6	437080.2	286.5	284.5	227.5	197.5
FTF 16	3682542.3	436989.1	288.6	286.8	233.8	203.8
FTF 17	3682571.0	436969.8	289.6	287.6	230.6	200.6

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
FTF 18	3682590.8	436953.6	288.0	286.3	232.3	202.3
FTF 19	3682598.5	436869.3	287.2	285.3	228.3	198.3
FTF 20	3682537.4	436849.6	287.1	285.3	228.3	198.3
FTF 21	3682500.6	436875.9	287.5	285.7	228.7	198.7
FTF 22	3682471.5	436895.6	286.8	284.6	242.6	212.6
FTF 23	3682466.8	436961.4	286.0	284.2	231.2	201.2
FTF 24A	3682647.3	436875.4	270.3	268.4	232.7	212.7
FTF 25A	3682675.8	436887.8	271.2	269.1	232.8	212.8
FTF 26	3682662.6	436899.9	270.9	268.8	226.3	206.3
FTF 27	3682647.7	436891.2	270.5	268.5	243.5	213.5
GBW 1	3691415.5	443676.7	333.7	332.6	279.6	249.6
H 2	3682473.7	439265.2	262.9	261.5	244.5	234.5
H 6	3682350.6	439184.9	260.1	259.2	235.2	225.2
H 7	3682336.0	439195.8	257.8	256.9	234.9	224.9
H 8	3682235.4	439230.5	257.2	253.8	228.4	218.4
H 10	3682159.7	439130.7	257.3	254.5	232.5	222.5
H 11	3682141.7	439127.4	249.3	246	222	212
H 18A	3682006.8	439059.1	239.5	237.5	227.5	217.5
H 19	3681977.0	438969.3	246.6	243.7	221.1	219.6
HAA 1D	3682655.9	440717.3	294.2	291.8	281.8	261.8
HAA 2D	3682611.4	440093.8	293.2	290.8	280.4	260.3
HAA 3D	3682531.3	439738.9	273.5	271.3	266.7	246.7
HAA 4D	3683040.8	440022.1	301.0	298.7	275.7	255.7
HAA 5D	3682779.3	440507.5	301.5	298.81	288.81	268.61
HAA 6D	3683208.4	440657.8	280.7	278.8	267.2	247.1
HAA 7D	3682735.2	439836.4	289.7	287.06	272.06	252.03
HAA 8D	3682796.9	439716.8	289.7	287.07	272.07	252.07
HAA 9D	3682926.3	439716.0	284.3	281.76	267.76	247.73
HAA 10D	3682938.9	439838.2	289.1	286.57	273.03	253.02
HAA 11D	3683002.9	439867.8	293.6	290.84	274.84	254.84
HAA 12D	3683067.1	439953.5	302.3	299.65	264.65	244.67
HAA 13D	3683115.9	440023.7	306.3	303.59	278.59	259.39
HAA 14D	3683162.1	440120.7	307.8	305.22	273.02	253.02
HAA 15D	3683224.3	440220.2	310.8	308.16	275.91	255.89
HAC 1	3682942.8	439914.5	298.6	296.4	278.8	258.8
HAC 2	3682946.3	439893.8	298.3	296.2	278.8	258.8
HAC 3	3682927.7	439887.3	298.2	295.4	275	255
HAC 4	3682922.6	439913.0	297.1	294.7	274.1	254.1
HAP 1	3683061.7	440575.6	289.3	287.3	276.3	256.3
HAP 2	3683062.0	440621.0	290.0	287.9	263.8	243.8
HC 8C	3684009.7	438629.1	264.2	262.3	192.3	187.3
HCA 1	3683333.0	440268.9	310.2	307.7	273.7	253.7
HCA 2	3683240.2	440274.0	310.9	308.4	273.4	242
HCA 3	3683364.9	440245.5	310.5	307.8	273.8	253.8
HCA 4	3683303.7	440227.6	310.8	308.3	273.3	241.9

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
HCB 2	3683153.0	440659.6	282.0	279.9	269.9	239.9
HCB 3	3683127.8	440723.9	275.6	273.6	263.6	233.6
HCB 4	3683187.8	440730.9	277.9	275.9	265.9	235.9
HET 1D	3682732.1	439740.4	282.4	279.9	260.3	240.3
HET 2D	3682665.3	439618.8	277.1	274.8	259.7	239.7
HET 3D	3682689.9	439607.0	276.9	274.6	259.9	239.9
HET 4D	3682720.6	439605.7	276.9	274.5	259.6	239.5
HGW 2D	3683472.1	439592.8	249.3	246.83	228.52	208.42
HGW 4D	3683873.7	440912.5	264.2	261.68	232.65	212.57
HHP 1D	3682502.9	439902.6	277.3	274.92	270.42	260.42
HHP 2D	3682516.6	439994.1	280.2	277.66	273.16	263.16
HMD 1D	3683762.5	437643.8	264.7	262.7	219.7	199.7
HMD 2D	3684045.8	437549.3	261.4	259.3	210.8	190.8
HMD 3D	3684109.6	437682.0	259.6	257.5	207.7	187.7
HMD 4D	3684086.0	437866.2	251.1	248.5	208.9	188.9
HOB 1D	3682338.9	438659.1	286.7	284.18	224.18	204.18
HOB 2D	3682358.1	438779.4	287.9	285.39	220.39	200.39
HOB 3D	3682374.9	439054.0	270.2	267.69	227.69	207.67
HOB 4D	3682409.7	439154.9	267.9	265.39	230.39	210.42
HOB 5D	3682466.5	439207.5	269.5	266.95	233.95	213.95
HOB 7D	3681951.9	438704.0	239.9	237.41	217.41	197.41
HR8 11	3682554.6	439497.9	259.3	257.4	237.6	207.9
HR8 12	3682472.6	439471.0	257.7	255.7	235.9	206.3
HR8 13	3682412.9	439503.2	253.2	251.2	231.4	201.7
HSB 0PD	3680811.8	437325.2	233.1	231	223.7	192.9
HSB 25PD	3681889.3	438795.9	232.5	230.6	217	187.1
HSB 50PD	3681885.1	438816.7	232.3	230.3	216.7	186.8
HSB 65	3682470.6	439134.0	272.2	270.4	242.4	212.4
HSB 66	3682201.8	438762.9	280.3	278.1	228.1	198.1
HSB 67	3682242.4	439297.2	237.9	235.7	230.7	200.7
HSB 68	3681974.9	438917.8	250.2	248.3	243.3	213.3
HSB 69	3681903.2	438809.5	236.2	234	229	199
HSB 70	3682035.9	438442.9	242.9	240.7	235.7	205.7
HSB 71	3682016.1	438276.5	241.5	239.8	234.8	204.8
HSB 83D	3682304.5	439318.8	237.2	234.4	228.7	198.7
HSB 84D	3681889.8	438772.0	229.0	225.7	219.5	199.5
HSB 86D	3682057.6	438516.7	263.2	260.7	236.6	206.6
HSB100D	3682449.3	439287.0	260.2	257.9	236.9	216.9
HSB100PD	3681861.0	438804.1	226.0	224	214.9	195
HSB101D	3682394.3	439250.9	259.1	256.4	236.1	216.1
HSB102D	3682347.1	439209.3	258.8	256.3	236.3	216.3
HSB103D	3682243.4	439255.5	247.8	245.4	233.7	213.7
HSB104D	3682146.7	439235.5	247.9	245.6	230.6	210.6
HSB105D	3682131.9	439171.4	249.7	247.2	231.8	211.8
HSB106D	3682157.5	439065.2	253.1	250.7	230.7	210.7

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
HSB107D	3682108.1	439013.5	262.5	260	235.1	215.1
HSB108D	3682058.2	438949.3	266.7	264	232	212
HSB109D	3682010.9	438885.7	261.7	259	233	213
HSB110D	3681997.2	438815.3	255.8	253.4	231.4	211.4
HSB111E	3682000.4	438743.2	256.1	253.7	231.7	211.7
HSB112E	3682042.3	438679.7	255.4	252.7	231.7	211.7
HSB113D	3682033.6	438597.4	261.1	258.7	236.2	216.2
HSB114D	3682065.2	438551.9	264.4	261.8	232.8	212.8
HSB115D	3682099.9	438502.2	269.5	266.9	233.9	213.9
HSB116D	3682148.7	438447.2	257.0	254.5	234.5	214.5
HSB117D	3681962.3	438269.1	237.8	235.3	220.3	200.3
HSB125D	3682269.4	439337.8	231.9	229.4	219.4	199.4
HSB126D	3681802.7	439144.4	212.9	210.5	200.5	190.5
HSB127D	3681878.5	438945.4	226.3	223.8	217.8	197.8
HSB129D	3681728.7	438419.5	214.9	212.7	205.2	185.2
HSB130D	3681381.6	438501.9	218.6	216.1	202.1	182.1
HSB131D	3681686.6	439123.9	212.4	209.8	205.7	195.7
HSB132D	3682300.9	439395.9	240.9	238.5	226.5	206.5
HSB133D	3682472.0	439385.6	255.5	253.1	228.5	208.5
HSB134D	3682148.6	439317.3	238.4	235.9	225.8	205.8
HSB135D	3681880.1	438855.5	232.5	229.9	219.9	199.9
HSB136D	3681896.0	438613.7	228.2	225.7	220.2	200.2
HSB137D	3681943.8	438486.3	236.8	234.3	225.3	205.3
HSB138D	3682082.8	438221.0	252.6	250.1	228.1	208.1
HSB139D	3681964.3	439107.7	234.0	231.7	226.7	206.7
HSB140D	3681546.3	439101.5	236.4	234.1	214.1	194.1
HSB141D	3682297.3	439538.6	254.9	252.8	237.8	217.8
HSB142D	3681754.2	437794.0	204.4	201.7	199.7	189.7
HSB143D	3681783.3	437502.0	223.1	220.9	216.9	196.9
HSB146D	3681999.7	439499.8	253.3	251.1	224.1	204
HSB147D	3682344.8	438235.2	267.5	265.2	235.2	215.2
HSB148D	3681361.0	438782.3	251.2	249.1	218.1	198.1
HSB149D	3681997.4	439046.6	240.2	238	227	207
HSB150D	3682336.8	439329.7	239.2	236.9	226.9	206.9
HSB151D	3681821.5	437946.0	213.8	211.6	207.6	197.6
HSB152D	3681638.7	438205.6	214.2	212	207	197
HSL 1D	3682498.4	439299.5	264.7	261.8	239.8	219.8
HSL 2D	3682590.5	439420.3	266.2	263.3	245.3	225.2
HSL 3D	3682667.7	439495.0	268.3	265.6	253.8	233.7
HSL 4D	3682789.5	439557.6	273.8	271.1	265.1	245
HSL 5D	3682846.3	439579.4	277.3	274.7	267.7	247.8
HSL 6D	3682904.7	439609.1	280.7	277.7	264	243.9
HSL 7D	3682942.7	439653.7	284.5	281.4	262.4	242.3
HSL 8D	3683016.7	439748.4	289.3	286.4	268.4	248.4
HSS 3D	3682569.5	441427.9	310.0	308.1	282.6	262.6

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
HTF 5	3682875.0	440225.8	305.8	304.3	284.3	264.3
HTF 6	3682863.9	440278.3	305.4	303.6	283.6	263.6
HTF 7	3682811.3	440272.9	305.3	303.5	283.5	263.5
HTF 12D	3682814.5	440075.1	325.9	323.22	272.22	262.22
HTF 13	3682895.8	440013.1	324.4	322.6	282.6	262.6
HTF 14	3682874.1	439982.2	323.9	321.9	281.9	261.9
HTF 15	3682815.6	439983.7	322.5	320.7	280.7	260.7
HTF 15D	3682814.1	439984.6	323.7	324.48	274.58	264.59
HTF 17	3683007.8	439781.6	290.2	288.4	258.4	238.4
HTF 18	3682810.1	439938.9	323.7	321.7	271.7	251.7
HTF 19	3682816.4	439879.9	324.8	322.7	265.7	245.7
HTF 20	3682859.8	439851.1	324.9	322.9	271.9	251.9
HTF 21	3682872.6	439907.5	324.7	322.6	262.6	242.6
HTF 22	3682948.0	440339.8	333.5	331.4	271.4	251.4
HTF 23	3682968.9	440368.6	334.0	331.8	276.8	256.8
HTF 24	3682987.6	440394.6	333.9	331.8	277.8	257.8
HTF 25	3682976.2	440450.6	334.3	332.5	272.5	252.5
HTF 26	3682927.8	440453.3	335.5	333.5	275.5	255.5
HTF 27	3682891.9	440420.9	333.1	331.1	279.1	259.1
HTF 28	3682871.4	440381.3	333.7	331.9	271.9	251.9
HTF 29	3682890.3	440329.6	333.5	331.9	289.9	259.9
HTF 30	3682828.7	440420.2	329.9	327.9	275.9	255.9
HTF 31	3682815.7	440477.2	327.7	325.7	266.7	246.7
HTF 32	3682874.7	440489.0	329.1	327.1	271.1	251.1
HTF 34	3682790.9	440237.5	305.5	303.7	271.7	251.7
HWP 1D	3682659.4	439531.9	262.2	259.86	249.86	239.86
HWP 2D	3682723.1	439510.5	270.3	267.5	263	253
HWS 1A	3679140.7	438461.0	324.7	323.2	255.2	225.2
HWS 2	3679136.4	438506.2	323.4	320.3	245.3	215.3
HWS 3	3679079.1	438490.7	325.5	323.5	243.5	213.5
HXB 1	3678489.3	439810.7	306.5	304.2	244.2	214.2
HXB 4D	3678533.4	439801.0	307.1	304.4	254.9	234.9
HXB 5D	3678490.1	439792.3	309.0	306.2	254.2	234.2
IDB 3	3686574.6	442399.1	325.1	323	234	229
IDB 4	3686341.6	442531.4	316.6	314.8	259.6	239.6
IDB 5	3686304.1	442771.9	322.1	320.1	255.1	235.1
IDB 6	3685554.6	443233.0	319.1	317	260.7	240.7
IDB 7	3685610.7	442885.2	313.6	311.4	261.4	241.4
IDB 8	3685710.7	443796.8	293.3	291.3	249.3	229.3
IDP 3D	3681903.9	431768.2	285.7	283.8	228.8	208.8
IDP 4	3681475.7	432389.4	240.8	238.6	199.6	189.5
IDP 5	3681591.0	432180.8	253.8	251.7	206.6	186.4
IDP 6	3681730.5	432065.6	261.7	259.6	209.1	184.5
IDP 7	3681899.2	432118.2	248.7	246.6	208.6	188.6
IDP 8	3682050.9	432181.4	264.6	262.5	204.5	185.4

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
IDP 9	3682108.1	431633.2	272.1	270	208	188
IDQ 4	3681213.9	431867.9	265.6	263.5	205.6	185.6
IDQ 5	3681147.4	431963.7	267.4	265	207.5	187.4
IDQ 6	3681141.6	432136.6	258.3	256.1	202.1	181.9
IDQ 7	3681162.3	432323.9	240.8	238.8	194.8	174.6
IDQ 8	3680966.1	431280.2	242.8	240.7	200.4	180.4
IDQ 9	3680637.1	431280.4	236.3	234.3	193.9	173.9
IDQ 10	3680411.4	431277.7	236.7	234.7	185.7	165.7
IDQ 11	3680176.9	431874.6	208.9	206.8	134.8	129.7
IDQ 12	3680985.5	432181.3	242.4	240.5	184.9	164.9
K 301P	3674676.5	437801.2	263.3	261	201	194.4
KAB 1	3674378.9	438047.1	266.3	264	224	194
KAB 2	3674284.3	438251.0	260.8	258.6	228.6	198.6
KAB 3	3674071.3	438270.6	250.3	248	223	193
KAB 4	3674234.7	437977.7	254.9	252	217	187
KAC 1	3674889.7	438691.1	266.2	264	229	199
KAC 2	3674922.7	438690.6	258.0	255.4	225.4	195.4
KAC 3	3674917.8	438711.7	257.9	255.8	225.8	195.8
KAC 4	3674872.8	438726.6	260.2	258	208	178
KAC 5	3674906.6	438717.0	259.2	256.8	224.3	204.3
KAC 6	3674897.1	438715.3	259.3	257.1	224.6	204.6
KAC 7	3674903.6	438665.7	265.3	263	223	203
KAC 8	3674886.9	438703.3	262.4	260.2	212.3	192.3
KAC 9	3674892.5	438679.0	267.3	265	215.7	195.7
KBP 1D	3674316.7	438280.6	264.5	262.15	202.06	192.04
KBP 2D	3674190.3	438301.6	259.1	256.34	194.3	184.29
KCB 1	3674405.7	437878.1	260.8	258.6	213.6	183.6
KCB 2	3674417.0	437799.8	254.5	252.7	217.7	187.7
KCB 3	3674333.8	437785.8	248.2	246.1	214.1	184.1
KCB 4	3674320.0	437862.3	255.8	253.9	218.9	188.9
KCB 5	3674303.7	437789.4	247.9	245.21	208.21	188.21
KCB 6	3674357.5	437756.9	247.4	244.76	207.76	187.76
KCB 7	3674453.3	437952.5	268.9	265.5	216.5	196.5
KDB 1	3674714.8	437993.4	273.3	270.8	205.8	184.8
KDB 2	3674646.4	437973.6	273.7	270.6	203.5	182.5
KDB 3	3674646.0	438031.4	273.5	270.5	205.4	184.2
KDB 4	3674600.5	437972.7	273.2	271	209.2	189.2
KDB 5	3674644.8	437896.3	270.4	268.4	208.5	188.5
KDT 1D	3674732.1	437963.5	273.3	270.7	213.7	193.7
KRB 8	3674900.3	437811.7	267.9	265.8	215.8	195.8
KRB 13	3674954.7	437653.2	283.6	281.8	217.8	197.8
KRB 16D	3674914.7	437834.4	268.6	266.5	211.5	191.5
KRB 17D	3674980.8	437636.2	284.4	282.1	206.8	186.8
KRB 18D	3675026.4	437638.0	282.7	280.8	205.8	185.8
KRB 19D	3675062.5	437657.9	281.9	279.8	206.8	186.8

APPENDIX B
WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
KRP 1	3675203.1	438408.8	264.0	262	237	207
KRP 2	3675230.9	438467.8	256.3	254.2	229.2	199.2
KRP 3	3675191.9	438546.2	254.6	252.5	237.5	207.5
KRP 4	3675179.7	438470.8	262.8	260.07	225.07	195.07
KRP 5	3675166.7	438326.2	268.1	265.5	210.85	200.84
KRP 6	3675076.2	438409.1	270.3	267.9	213.12	203.12
KRP 7	3675057.8	438288.6	270.6	267.9	213.2	203.16
KRP 8	3675150.9	438374.9	267.6	265.09	210.09	200.09
KRP 9	3675145.1	438424.2	268.4	265.83	210.83	200.83
KSB 1	3674602.3	437842.0	267.5	265.6	205.6	175.6
KSB 2	3674554.9	437837.5	265.9	263.8	203.8	173.8
KSB 3	3674568.7	437798.0	261.7	259.7	199.7	169.7
KSB 4A	3674616.9	437812.4	264.2	259.1	199.6	169.6
KSB 5D	3674659.2	437862.2	269.5	267.1	214.5	194.5
KSM 1D	3674731.1	437944.7	272.9	270.2	213.7	193.7
KSS 1D	3673127.8	439070.8	230.0	228.1	177.5	157.4
KSS 2D	3672931.6	439295.7	192.5	190.4	164.7	144.6
KSS 3D	3672948.0	439400.9	185.4	183.2	159.3	139.3
LAC 1	3674497.5	442257.1	238.6	236.1	221.1	191.1
LAC 2	3674511.3	442228.7	240.5	238.4	223.4	193.4
LAC 3	3674464.7	442231.2	238.0	235.7	220.7	190.7
LAC 4	3674482.5	442249.8	237.2	235.3	215.3	185.3
LAC 5DU	3674529.2	442245.2	241.5	239.3	227.8	207.9
LAC 6DU	3674477.0	442221.9	239.9	237.7	221.7	201.7
LAC 7DU	3674431.3	442230.4	242.0	239.8	224.8	204.9
LAC 8DU	3674464.2	442274.9	236.9	234.5	219.8	199.8
LBP 1D	3675746.8	442172.8	306.8	304.29	256.29	246.29
LBP 2D	3675792.5	442127.6	299.4	296.88	251.88	241.88
LBP 3D	3675705.4	442014.3	295.3	292.84	252.84	242.84
LCO 1	3674422.7	442175.4	240.9	238.8	225.8	195.8
LCO 2	3674467.6	442175.1	241.7	239.6	226.6	196.6
LCO 3	3674451.8	442212.9	241.4	239.3	226.3	196.3
LCO 4	3674409.5	442214.6	237.3	235.3	222.3	192.3
LCO 8DU	3674590.7	442205.4	246.1	243.7	226.1	211.1
LDB 1	3674526.4	441961.5	252.1	250.5	215	185
LDB 2	3674591.0	441987.7	253.1	250.5	214.5	184.5
LDB 3	3674559.8	441912.9	253.4	251.2	219.3	199.3
LDB 4	3674462.3	441913.6	250.1	247.7	220.7	200.7
LFP 1WP	3682584.8	434048.6	139.8	138.3	128.2	126.2
LFP 2WP	3682571.9	434153.7	139.9	135.6	126.6	124.6
LFP 3WP	3682581.2	434278.1	136.6	133.9	126.2	124.2
LFP 4WP	3682642.2	434382.4	137.0	132.5	127.2	125.2
LFP 5WP	3682750.9	434394.7	134.8	133.5	125	123
LFP 6WP	3682861.9	434444.8	137.7	135.7	128.2	126.2
LFP 7WP	3682922.2	434536.8	137.1	135.6	127.6	125.6

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
LFP 9WP	3682417.4	434108.1	135.9	134.6	125	123
LFP 10WP	3682443.0	434221.8	135.0	133.4	125.2	123.2
LFP 11WP	3682517.9	434309.3	134.7	132.7	125	123
LFP 12WP	3682510.0	434448.6	132.6	130.7	124.2	122.2
LFP 13WP	3682757.5	434539.3	138.5	133.4	128.9	126.9
LFP 14WP	3682624.0	434711.4	133.8	130	123.5	121.5
LFW 6	3683088.9	433712.3	172.0	170.2	160.4	141.1
LFW 6R	3683049.9	433722.9	170.8	168.2	154.53	134.55
LFW 7	3683046.8	433772.2	171.5	169.6	159.8	140.5
LFW 8	3682995.7	433845.8	170.7	169	159.2	139.9
LFW 8R	3682975.0	433860.6	171.1	168.7	155.07	135.06
LFW 9	3683075.6	433933.7	174.9	172.9	163.1	143.1
LFW 10A	3683172.0	433913.5	181.9	179.44	164.44	134.44
LFW 16	3683250.6	433825.1	179.2	177.2	161.2	131.2
LFW 17	3683170.6	433790.8	178.0	176.5	158.5	128.5
LFW 18	3683137.8	433759.0	184.2	181.65	167.65	137.65
LFW 19	3683138.8	433636.1	176.9	175	160	130
LFW 20	3683328.8	433666.5	180.8	179	165	135
LFW 21	3683163.2	434000.5	185.4	182.91	167.91	137.91
LFW 22	3683205.9	434035.7	174.7	172.4	152.4	122.4
LFW 23	3683236.2	434063.0	172.3	170.1	155.1	125.1
LFW 24	3683320.0	434026.4	171.8	169.5	154.5	124.5
LFW 25	3683407.1	433927.1	175.2	173.2	153.2	123.2
LFW 26	3683434.5	433608.8	186.7	184.2	164.2	143.2
LFW 27	3683473.1	433566.4	189.5	186.9	163.9	142.9
LFW 28	3683525.1	433513.2	192.6	190.1	162.1	141.1
LFW 29	3683588.0	433447.8	195.5	192.9	164.9	143.9
LFW 30	3683515.0	433375.7	210.2	207.7	162.7	141.7
LFW 31	3683447.0	433311.4	229.6	227	166	145
LFW 32	3683354.2	433404.1	223.9	221.3	165.3	144.3
LFW 33	3683310.8	433449.7	213.9	211.4	165.4	144.4
LFW 34	3683263.4	433500.7	201.2	198.7	164.7	143.7
LFW 35	3683285.9	433620.7	183.9	181.4	164.4	143.4
LFW 36	3682903.2	433976.1	170.8	168.3	151.3	130.3
LFW 36R	3682892.3	433960.2	168.8	166.4	142.03	122
LFW 37	3682814.4	434072.8	170.2	167.8	150.8	129.8
LFW 38	3682891.9	434148.7	170.7	168.5	151.5	130.5
LFW 39	3682937.8	434190.6	171.7	169.2	152.2	131.2
LFW 40	3682978.3	434227.7	171.7	169.2	152.2	131.2
LFW 41	3683033.7	434274.8	171.0	168.3	151.3	130.3
LFW 41R	3683018.8	434288.8	170.1	167.6	140.23	120.19
LFW 42	3683132.9	434167.1	171.0	168.2	151.2	130.2
LFW 43D	3683558.9	433371.4	203.1	200.9	170.9	150.9
LFW 44D	3683046.4	433660.9	170.4	168.3	159.3	139.5
LFW 45D	3682992.3	433745.3	166.5	164.4	154.7	134.7

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
LFW 46D	3682955.7	433779.8	165.3	163.1	157.1	137.3
LFW 47D	3682900.5	433815.4	161.9	159.7	154.7	134.9
LFW 48D	3682954.4	433880.1	169.7	167.5	155	134.9
LFW 55D	3682848.9	433867.5	155.6	153.4	141.4	121.2
LFW 56D	3682819.9	433932.8	158.3	155.9	151.4	131.3
LFW 57D	3682788.5	433997.4	165.0	162.9	150.4	130.6
LFW 58D	3682777.8	434111.8	167.8	165.6	147.6	127.5
LFW 59D	3682856.2	434188.8	167.7	165.3	149.3	129.3
LFW 60D	3682680.9	434190.6	157.2	155.2	143.8	123.8
LFW 61D	3682952.6	434275.1	168.4	166.4	150.4	130.3
LFW 62D	3682830.3	434157.5	165.0	162.6	147.6	127.6
LFW 63D	3682707.7	434113.4	168.6	166.2	146.4	126.4
LFW 64D	3682652.6	434044.8	152.7	150.2	135.2	115.2
LFW 65D	3682760.1	434264.7	148.7	146.3	131.5	111.5
LFW 66D	3682836.7	434247.4	162.0	159.6	141.8	121.8
LFW 67D	3682905.5	434331.6	158.1	155.4	140.6	120.6
LFW 68D	3683009.6	434383.2	161.8	159.4	144.6	124.6
LFW 69D	3682621.7	434150.4	146.4	144	139	119
LFW 70D	3682649.0	434258.2	146.5	144.3	138.3	118.3
LFW 71D	3682808.7	434322.8	147.8	145.5	135.5	115.5
LFW 72D	3682986.1	434428.6	150.6	148	140	120
LFW 74D	3683381.1	433445.6	214.1	211.7	167.7	152.7
LFW 75D	3683437.1	433501.9	198.3	196	166	151
LFW 76	3683284.3	433388.2	222.0	219.4	157.9	142.9
LFW 77	3683495.7	433275.0	222.7	220.15	159.15	144.15
LFW 78	3683372.8	433311.7	239.1	236.42	164.92	149.92
LRP 1	3674920.1	441124.0	253.0	250.8	215.8	185.8
LRP 2	3674887.3	441180.2	256.8	254.7	214.7	184.7
LRP 3	3674854.4	441145.1	258.3	256.4	221.4	191.4
LRP 4	3674864.0	441103.0	255.7	253.3	203.3	173.3
LRP 6	3674963.3	441017.4	241.2	238.7	208.71	198.7
MCB 2	3686142.0	431447.6	328.6	326.1	225.9	205.9
MCB 4	3686194.1	431249.9	350.6	348.2	229.6	208.6
MCB 5	3686174.1	431324.3	339.8	337.7	226.3	206.3
MCB 6	3686259.0	431394.4	332.3	329.9	219.7	199.7
MCB 8D	3686119.0	431329.0	340.7	337.4	225.7	205.7
MCB 9D	3686239.7	431274.6	342.9	339.1	226.2	206.2
MCB 10D	3686605.1	431417.2	320.5	317.9	244.9	224.9
MCB 10DR	3686605.1	431417.1	320.7	318.43	227.43	207.43
MCB 11D	3686031.7	431620.6	302.7	300.3	230.3	210.32
MCB 13D	3685772.9	431275.2	357.4	355	235	214.9
MGA 36	3682737.8	438735.7	298.3	296.2	254.2	234.2
MGC 9	3682690.5	437910.5	284.1	282.3	237.3	217.3
MGC 11	3682689.7	437971.4	291.2	289.2	239.2	219.2
MGC 19	3682685.3	438215.1	286.6	284.6	234.6	230.6

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
MGC 23	3682682.7	438336.8	287.7	283.9	247.9	227.9
MGC 32	3682677.7	438612.6	298.0	287	252	232
MGC 36	3682676.5	438736.9	296.6	294.4	254.4	234.4
MGE 9	3682630.1	437908.8	283.6	281.1	238.1	218.1
MGE 15	3682626.1	438093.1	285.0	283	239	219
MGE 21	3682622.5	438275.0	285.0	282.9	247.9	227.9
MGE 30	3682617.3	438553.6	282.2	280.3	249.3	229.3
MGE 34	3682615.3	438675.5	294.4	292.2	257.2	237.2
MGG 15	3682567.9	438090.6	284.0	282.3	243.3	223.3
MGG 19	3682565.9	438213.7	280.0	278	246	226
MGG 23	3682563.2	438335.3	277.8	276.1	247.1	227.1
MGG 28	3682559.5	438490.1	276.5	274.3	250.3	230.3
MGG 36	3682554.1	438737.6	291.2	290.5	252.5	232.5
MSB 1A	3687928.4	431405.4	353.2	352.2	253.2	223.2
MSB 1D	3687925.6	431401.8	355.0	352.8	229.8	210.4
MSB 2A	3688026.4	431439.3	352.6	351.2	252.6	222.6
MSB 2D	3688024.5	431444.1	354.0	351.7	230.1	210.7
MSB 4A	3687940.0	431338.8	354.8	352.9	254.8	224.8
MSB 4D	3687943.3	431335.9	355.8	353.4	228.4	209
MSB 5A	3687699.0	431018.9	344.8	342.2	247.2	217.2
MSB 6A	3687370.9	431001.9	344.0	341.9	241.9	211.9
MSB 7A	3687308.7	431200.3	344.6	342	242	212
MSB 8A	3687466.9	431298.8	344.4	342.4	242.4	212.4
MSB 9C	3687995.0	431283.7	359.9	357.6	241.6	221.6
MSB 11E	3688156.6	431281.6	365.2	363.5	251	231
MSB 11F	3688144.0	431289.8	365.8	363.6	243.1	223.1
MSB 13C	3687737.2	431188.3	347.3	345.1	244.1	224.1
MSB 13D	3687744.4	431181.4	347.8	345.5	231.5	211.5
MSB 14C	3687891.7	431450.9	349.4	347.2	243.9	223.9
MSB 15C	3688282.0	431286.2	366.7	364.8	260.6	240.6
MSB 15D	3688273.2	431290.2	368.8	366.4	241.4	221.9
MSB 16C	3688481.9	431192.2	367.6	365.8	244.8	224.8
MSB 17D	3687581.5	430813.3	360.2	357.8	232.8	213.3
MSB 18C	3687162.1	431079.1	342.7	340.4	229.2	209.2
MSB 20C	3687926.2	430510.6	354.9	352.7	232.7	212.7
MSB 21C	3688234.3	430718.1	355.1	353	233.2	213.2
MSB 22	3688022.7	431352.4	360.4	358.2	243.2	223.2
MSB 24	3688860.1	431245.7	380.5	378.9	243.9	223.9
MSB 26	3688698.1	431023.9	362.0	359.7	240.7	220.7
MSB 27	3688884.7	431093.9	375.7	374	244	234
MSB 28	3688703.0	430860.4	355.0	352.6	230.6	210.6
MSB 29D	3689775.6	431100.8	365.1	362.6	227.6	207
MSB 29DD	3689766.3	431094.2	364.4	362.4	250.4	230.4
MSB 30C	3688807.2	430594.8	354.8	352.6	237.6	217.6
MSB 31C	3688255.3	431779.0	348.3	346.1	236.1	216.1

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
MSB 32	3688156.9	432847.1	255.3	253.1	218.1	198.1
MSB 33	3687577.8	432892.7	256.1	253.7	228.7	208.7
MSB 34C	3689063.1	431358.9	384.1	381.9	240.9	220.9
MSB 35D	3688444.7	431965.2	352.0	349.5	254.5	233.8
MSB 36D	3687799.0	431907.0	341.7	339.5	249.5	228.8
MSB 37D	3689308.3	431521.4	382.7	380.7	245.7	225.1
MSB 38D	3688299.3	431629.3	358.9	356.4	240.4	220.9
MSB 39D	3687675.4	431562.7	341.9	339.7	239.7	219
MSB 40D	3686879.6	432100.2	323.1	320.8	236.8	216.2
MSB 41D	3688907.1	432553.4	325.1	322.8	247.8	227.1
MSB 42D	3689167.3	431677.7	376.5	374.2	247.2	226.6
MSB 43DD	3689425.1	430645.3	357.9	356.2	243.2	223.1
MSB 44C	3688762.0	431793.3	376.8	374.4	239.4	229.4
MSB 46C	3688613.2	431691.4	372.6	370	247	237
MSB 47D	3689857.8	431401.7	369.0	366.6	246.1	226.5
MSB 48D	3690428.6	431691.9	362.8	360.5	243.5	222
MSB 49D	3686940.7	431140.4	334.4	331.8	236.4	216.7
MSB 50D	3687056.0	433011.6	223.4	220.7	210.9	190.8
MSB 51D	3687521.3	433340.8	262.4	260	218.5	198.8
MSB 52D	3689118.7	432404.4	321.8	319.4	250.8	231.1
MSB 53D	3690156.5	432077.2	344.9	342.9	244.9	223.6
MSB 54D	3690371.2	431329.7	373.8	371.4	244.8	223.8
MSB 55D	3690183.2	431107.8	367.9	365.9	245.9	224.7
MSB 56D	3688797.8	429167.2	279.7	277.4	232.4	211.1
MSB 57D	3687969.3	431463.9	356.4	354.1	229.6	210.1
MSB 58D	3688059.3	431395.4	358.1	355.8	230.5	211.1
MSB 59D	3687986.9	431305.4	359.5	357.3	229.3	209.9
MSB 60D	3687903.6	431370.5	354.7	352.3	228.3	208.9
MSB 61D	3690219.6	432346.9	318.0	315.7	234.2	214.3
MSB 62D	3687827.3	431258.7	349.7	347.4	231.9	212.4
MSB 63D	3687650.7	431370.1	347.0	344.8	232.8	212.8
MSB 64D	3687598.4	430941.2	348.8	346.6	230.1	210.1
MSB 65D	3688118.2	431623.9	349.5	347.1	243.9	224.4
MSB 66D	3689377.9	431321.4	384.1	381.5	239.5	220
MSB 67D	3689787.8	431372.6	365.6	363.1	241	221.5
MSB 68D	3689823.6	431468.0	357.5	354.9	239.9	220.4
MSB 69D	3690110.7	431322.4	382.2	379.8	239.8	220.3
MSB 70D	3687293.3	430559.9	362.4	360.3	228.3	208.2
MSB 74D	3687635.0	432373.7	315.3	313.1	237.1	217.1
MSB 77D	3690257.5	431883.2	357.6	355.2	236.2	216.2
MSB 78D	3687839.0	430345.4	363.8	361.1	225.5	206.1
MSB 78DR	3687838.9	430341.1	363.7	361.5	226.9	206.82
MSB 79C	3687090.1	431570.7	348.0	345.6	199.6	194.9
MSB 82D	3689950.5	431240.2	373.8	371.4	236.9	216.8
MSB 83D	3690254.2	431191.3	371.7	369.3	236.1	216.7

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
MSB 85D	3690236.2	431474.9	381.0	378.8	236.3	216.2
MSB 87C	3688352.3	432276.1	337.1	334.6	246.6	241.6
MSB 88D	3687157.8	432843.1	237.3	234.9	212.2	192.1
MSB 89C	3686972.4	431880.6	340.1	337.6	222.6	217.6
MWD 1D	3684764.7	443749.1	330.0	327.9	272.9	227.8
MWD 2D	3684833.2	443758.9	324.6	322.5	267.5	247.5
MWD 5D	3684739.3	443910.2	324.9	323	269.5	249.5
MWD 8	3684880.6	443662.2	325.8	323.7	273.7	253.7
MWD 9	3684621.2	443888.5	322.5	320.6	260.6	240.6
NBG 1	3683347.7	436779.6	311.7	309.5	232.3	200.9
NBG 2	3683312.5	436835.0	312.9	310.6	233.6	203.6
NBG 3	3683292.7	436890.8	312.5	310.5	233.5	202.1
NBG 4	3683340.2	436954.6	306.7	304.5	227.5	196.1
NBG 5	3683373.9	437000.3	303.7	301.4	226.4	194.9
NEB 12D	3679383.7	439290.3	277.9	276.9	250.4	245.4
NEB 14D	3679620.8	438896.1	262.7	260.5	240.5	235.5
NEB 15D	3679499.8	439018.6	268.4	265.9	245.9	240.9
NEB 16D	3679413.9	439211.1	272.5	272.8	246.8	241.8
NEB 17DU	3679384.0	439512.7	292.6	289.48	254.37	234.27
NEB 18DU	3679382.9	438979.8	281.0	277.68	251.58	241.55
NEB 20DU	3678938.7	438947.2	315.6	312.93	236.13	231.03
NEB 21DU	3679100.4	438664.2	313.7	310.84	237.84	232.84
NEP 1D	3684179.8	437357.9	260.3	257.75	193.75	183.73
NEP 2D	3684137.3	437510.6	268.0	265.35	200.35	190.34
NEP 4D	3684136.4	438473.2	233.3	230.72	196.72	186.72
NPM 1	3683282.8	443234.1	306.1	303.8	277.40	257.30
NPM 2	3680130.3	440769.7	337.1	334.9	264.2	244.2
NPM 3	3679388.5	440241.4	336.3	333.9	267.2	247.2
NPM 4	3679408.8	440904.1	313.8	311.6	276.7	256.7
NPM 19A	3679983.5	440612.7	327.3	327	268.2	248.2
NPM 34A	3679218.2	440698.5	321.7	320.3	289.8	279.8
NPN 1	3683282.8	443234.1	337.2	335	277.4	257.3
NPN 2	3683761.3	443512.1	329.8	327.5	278.0	257.9
NPN 3	3683457.5	442786.4	317.4	315.2	280.1	260.0
NPN 4	3682987.0	443503.0	307.3	305.1	285.5	265.4
NTN 1	3676361.0	438730.9	259.9	257.8	232.4	212.4
NTS 1	3673373.7	440276.8	236.2	233.9	184.4	164.3
NTS 2	3673764.5	440720.2	246.5	244.3	191.5	171.5
NTW 1	3673385.4	438897.8	247.0	244.9	188.8	168.9
NTW 2	3673354.4	438579.4	245.4	243.1	191.5	171.5
NTW 3	3673867.2	438905.5	261.7	259.5	196.6	176.7
NTW 4	3673605.6	439272.9	228.5	226.2	185.8	166
NWP 1D	3683419.8	437742.1	275.1	272.7	212.72	202.62
NWP 2D	3683874.9	437500.3	249.8	247.3	202.33	192.31
NWP 3D	3682999.7	437577.4	315.9	313.5	235.45	215.33

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz_top	Elevation Sz_bot
NWP101D	3683188.1	437540.3	336.0	333.6	223.59	213.59
P 13D	3673679.8	446124.2	255.7	253.3	228.30	206.6
P 15D	3674983.8	441832.0	255.5	253.1	239.70	218.90
P 16D	3693111.3	440388.4	263.5	261.6	231.6	211.6
P 17D	3689404.8	453444.1	334.7	332.8	288.30	269.30
P 18D	3679339.6	437355.7	298.9	297.0	227.1	207.1
P 19D	3678542.1	442603.1	299.7	297.7	273.2	253.2
P 22D	3672418.2	452153.1	217.3	215.4	215.4	156
P 23D	3671541.8	436729.0	183.9	182.0	147.6	127.6
P 24D	3676707.0	446400.4	315.4	313.3	268.3	248.3
P 25D	3674657.2	438721.3	266.7	265.1	225	205
P 26D	3675114.9	429265.5	154.5	151.8	121.9	101.8
P 29D	3683130.9	432756.8	269.0	266.4	173.9	153.9
PAC 1	3676847.7	446363.4	296.2	266.4	283.9	253.9
PAC 2	3676884.7	446422.3	285.1	293.9	277.9	247.9
PAC 3	3676877.5	446382.5	290.2	282.9	282.9	252.9
PAC 4	3676855.6	446399.1	291.8	287.9	280.6	250.6
PAC 5	3676879.8	446398.0	289.6	289.6	275.1	255.1
PAC 6	3676882.1	446391.6	289.6	287.1	275.2	255.2
PBP 1D	3677173.2	445739.9	317.6	287.2	279.08	269.08
PBP 2D	3677075.3	445672.6	316.3	315.08	272.8	262.8
PBP 3D	3677132.3	445687.7	319.4	313.8	278.89	268.89
PCB 1A	3676162.9	446227.8	305.7	316.89	293.5	263.5
PCB 2A	3676089.6	446213.5	305.0	303.5	287.8	257.8
PCB 3A	3676109.3	446129.4	304.8	302.8	292.7	262.7
PCB 4A	3676177.6	446153.3	309.7	302.7	292.9	262.9
PDB 2	3676479.8	445873.6	319.6	307.9	268.7	247.7
PDB 3	3676521.9	445916.5	319.7	316.9	269.1	248.1
PDB 4	3676444.1	445854.6	319.1	317.1	286.2	266.2
PDB 5	3676597.5	445728.1	319.1	317.1	284.2	264.2
PRP 1A	3676625.5	445122.9	284.7	317.2	262.9	232.9
PRP 2	3676670.5	445164.1	286.6	282.9	264.1	234.1
PRP 3	3676612.6	445182.3	280.8	284.1	258.6	228.6
PRP 4	3676661.8	445214.5	284.8	278.6	262.9	232.9
PRP 6	3676616.7	445186.9	281.9	282.9	249.32	234.32
PRP 7	3676605.4	445156.2	282.0	279.32	244.15	229.15
PSB 1A	3676398.0	445706.3	329.3	279.15	287.4	257.4
PSB 2A	3676356.0	445652.2	323.9	327.4	287.2	257.2
PSB 3A	3676294.4	445574.1	318.8	322.2	286.5	256.5
PSB 4A	3676234.6	445525.9	312.7	316.5	285.5	255.5
PSB 5A	3676258.1	445606.6	319.5	310.5	292.3	262.3
PSB 6A	3676323.2	445698.4	324.4	317.3	292.1	262.1
PSB 7A	3676410.4	445757.5	330.9	322.1	289	259
PSS 1D	3676926.9	449705.4	219.9	329	202.1	182.1
PSS 2D	3676640.9	449965.1	229.0	217.5	197.1	177.1

APPENDIX B
WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
PSS 3D	3676666.2	450032.9	234.2	226.6	198.5	178.5
RAC 1	3681098.4	446215.4	283.8	231.8	277.3	247.3
RAC 2	3681075.7	446226.2	280.5	282.3	273.4	243.4
RAC 3	3681093.1	446255.8	279.5	278.4	272.3	242.3
RAC 4	3681071.2	446242.0	279.2	277.3	268.2	238.2
RBP 1D	3682157.8	446578.8	305.7	277.2	253.31	243.31
RBP 2D	3682057.8	446624.9	305.8	303.21	253.37	243.37
RBP 3D	3681995.1	446555.8	310.2	303.27	258.68	248.68
RBW 1D	3682744.4	444891.6	286.3	307.68	263.08	242.99
RBW 2D	3681487.3	444879.3	327.3	284.1	304.9	284.9
RCP 1D	3681494.5	445796.2	297.0	324.9	281.3	261.3
RDB 1D	3681637.7	445926.0	292.7	294.8	285.5	265.5
RDB 2D	3681572.9	445949.7	292.9	290.5	285.7	265.7
RDB 3D	3681594.4	445978.1	293.0	290.7	285.8	265.8
RPC 1D	3681730.4	445621.5	307.5	290.8	284.46	264.46
RPC 1PW	3681727.1	445613.4	307.6	304.96	285.56	270.56
RPC 1PZ	3681723.8	445609.6	307.8	305.06	285.27	270.23
RPC 2D	3682111.1	446063.4	294.6	305.29	279.39	259.39
RPC 2PR	3681721.5	445603.4	307.9	292.29	270.9	230.9
RPC 3DU	3682052.6	445963.3	308.5	305.9	287.19	272.23
RPC 5DU	3682199.6	445805.7	304.6	306.19	277.3	262.3
RPC 6DU	3682131.5	445670.2	301.2	302.3	283.78	268.96
RPC 7DU	3682035.8	445589.3	302.4	298.78	277.82	240.82
RPC 8DU	3681896.6	445669.8	303.5	299.82	288	273
RPC 9DU	3681774.6	445699.4	303.8	301	283.34	268.34
RPC 10DU	3681652.8	445800.3	295.1	301.34	287.45	272.48
RPC 11DU	3681780.2	445975.1	293.6	292.45	286.21	271.22
RPC 13DU	3681683.6	445881.3	283.5	291.21	264.36	249.29
RPC 14DU	3681807.9	446020.1	293.4	281.36	271.92	256.91
RPC 15DU	3682025.0	446213.2	283.5	290.92	267.36	252.31
RRP 1	3681155.3	446575.0	284.7	281.36	272.54	242.54
RRP 2	3681166.8	446640.1	284.7	282.54	272.68	242.68
RRP 3	3681130.2	446675.5	280.5	282.68	268.21	238.21
RRP 4	3681100.0	446650.0	280.3	278.21	268.15	238.15
RSA 7	3681939.3	445838.9	312.4	278.15	289.5	269.6
RSA 9	3682029.0	445932.0	311.7	310.5	284.5	264.6
RSA 10	3682000.3	445867.3	311.3	309.7	288.7	268.8
RSB 7	3681820.2	445868.4	309.0	309.7	292.6	272.7
RSC 2	3681910.3	445552.0	302.0	307.2	281.9	261.9
RSC 3	3682012.6	445598.5	301.3	299.9	278.6	258.6
RSC 4	3682127.3	445665.1	300.3	299.6	288.6	268.6
RSC 5	3682196.9	445760.3	304.9	298.6	278.3	258.3
RSC 6	3682160.6	445862.6	304.1	302.3	287.7	267.7
RSC 7	3682060.3	445935.6	307.8	300.7	283.4	263.4
RSC 8	3681965.8	446003.5	308.8	306.4	299.3	271.3

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
RSC 9	3682115.8	445472.8	301.8	307.3	271.6	251.6
RSC 10	3682352.3	445641.6	297.4	299.6	275.5	255.5
RSD 1	3681756.5	445911.4	300.5	293.5	287.7	267.9
RSD 3	3681699.5	445827.4	300.8	298.7	289.1	269.3
RSD 4	3681778.1	445940.7	301.6	298.9	290.6	270.6
RSD 5	3681787.1	445953.9	301.7	299.6	289.6	269.6
RSD 6	3681796.3	445965.8	302.1	299.6	290.1	270.1
RSD 7	3681770.7	445955.0	293.4	300.1	287.3	267.3
RSD 8	3681779.9	445967.7	293.0	291.3	287.3	267.3
RSE 1A	3681771.0	445779.3	304.2	291.3	294.8	274.8
RSE 1B	3681767.7	445776.2	303.3	302.3	295.7	275.7
RSE 1C	3681765.0	445772.9	303.3	301.7	288.5	268.5
RSE 2	3681742.2	445811.9	302.5	301.5	289.5	269.7
RSE 3A	3681739.1	445884.9	301.0	300.7	288	268.2
RSE 7	3681967.8	445662.8	302.4	299.2	286.3	266.5
RSE 8	3681997.3	445673.6	302.2	300.9	291	271.2
RSE 9	3681996.9	445712.2	306.0	300.2	286.7	266.7
RSE 10	3681964.4	445689.6	304.7	304.2	290.5	270.7
RSE 10DU	3681962.8	445691.3	307.5	303.2	273.1	253
RSE 12	3681938.1	445706.5	305.8	305.1	269.1	259.1
RSE 18	3681920.1	445718.6	307.1	304.1	288.1	268.1
RSE 19	3681929.0	445693.9	304.8	305.1	282.5	262.5
RSE 26DU	3681779.5	445814.5	308.2	302.5	274.35	263.65
RSP 1D	3681509.1	445862.2	294.5	306.2	289.7	274.7
RSP 2D	3681484.2	446310.6	292.7	291.8	280.3	260.3
RSP 3D	3681851.6	446331.4	286.8	290.3	281.2	261.2
RSP 4D	3681928.3	446127.2	300.6	284.3	285.2	265.2
RSP 5D	3682303.5	445982.0	296.8	298.2	283.5	263.4
RSP 6D	3682276.1	445656.8	300.3	294.4	276	255.9
RSP 7D	3682038.2	445427.3	304.9	297.9	278.4	258.5
SBG 2	3684165.9	440352.5	290.1	302.5	235.9	205.9
SBG 3	3684009.9	440588.9	286.8	287.9	236.6	206.6
SBG 6	3683733.1	440260.7	281.9	284.6	238.1	208.1
SCA 2	3683945.1	440421.8	289.1	280.1	245.9	215.9
SCA 3	3683949.3	440371.3	287.5	286.9	240.3	220.3
SCA 3A	3683950.7	440370.3	287.3	285.3	277.1	267.1
SCA 4	3683922.6	440387.9	286.4	285.3	240.4	220.4
SCA 4A	3683923.0	440389.0	286.1	283.9	275.3	265.3
SCA 5	3683992.9	440362.1	288.4	283.9	243.7	223.7
SCA 6	3683898.9	440433.1	286.0	286.1	241.1	221.3
SLP 1	3683680.9	440520.7	285.0	283.8	248	228
SLP 2	3683671.9	440557.6	284.0	283	237.7	217.7
SLW 1	3682958.0	431945.2	304.1	281.8	180	160
SLW 2	3683190.9	431702.3	304.6	302	197	171.9
SLW 3	3682915.1	431564.0	278.7	302.3	188.7	168.7

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
SLW 4	3682612.1	431782.5	300.7	276.7	189.2	169.2
SLW 5	3682564.3	431404.9	242.0	299.2	194.6	174.6
SLW 6	3682381.6	431570.9	251.5	239.6	199.1	179.1
SLW 7	3682736.2	431277.9	231.1	249.1	174.1	154.1
SLW 8	3683087.9	431262.2	257.5	229.1	195.3	165.3
SRW 1	3687140.9	429317.6	315.3	255.3	230.2	200.2
SRW 2	3687166.9	429381.7	321.8	313.2	228.6	198.6
SRW 4	3687075.1	429443.0	320.8	318.6	230.1	200.1
SRW 5	3687022.7	429340.8	309.5	318.1	224.6	194.6
SRW 6	3687068.8	429308.7	307.8	307.6	222.6	192.6
SRW 7	3686996.8	429241.4	299.7	305.6	217.5	197.5
SRW 8	3686894.8	429138.3	288.3	296.7	215.7	195.7
SRW 9	3686705.4	428986.9	253.6	286.7	196.3	166.3
SRW 11	3687024.8	429201.4	296.0	251.3	220.6	190.6
SRW 12C	3686697.6	428741.9	236.5	293.6	198.9	179.1
SRW 13C	3686816.4	429280.9	297.8	234.3	225.4	195.8
SRW 15C	3687357.8	429098.7	319.2	295.9	217.3	187.7
SRW 16C	3687397.2	429671.9	346.8	317.3	235.7	205.7
SRW 19	3687044.7	429785.4	355.9	345.3	220.78	210.78
TBG 1	3674819.2	429138.9	151.4	353.08	109.1	89.1
TBG 3	3674801.0	429168.4	151.4	149.1	108.9	88.9
TBG 4	3674786.9	429178.6	151.6	148.9	109.3	89.3
TBG 5	3674808.6	429229.5	149.6	149.3	112.4	92.4
TBG 6	3674860.2	429167.8	148.3	147.4	109.1	89.1
TBG 7	3674861.1	429264.2	146.9	145.9	104.7	84.7
TCM 2	3674580.8	428960.0	94.6	144.7	93.18	83.17
TCM 3	3674579.3	428961.9	97.6	96	85.49	82.99
TCM 4	3674575.9	428954.2	99.6	96	94.58	79.58
TCM 5	3674571.3	428957.4	99.9	96.83	94.86	79.86
TCM 6	3674567.2	428959.8	100.5	97.11	94.37	79.37
TCM 7	3674566.4	428964.5	100.9	97.54	95.86	80.86
TCM 8	3674564.0	428946.0	99.8	97.61	94.75	79.75
TIR 1M	3674546.4	428974.0	101.7	97	86.56	84.59
TIR 1U	3674547.7	428973.3	101.6	99.56	91.98	90.01
TIR 2	3674544.1	428947.8	101.3	99.48	86.23	84.2
TIR 3B	3674628.1	429047.4	100.6	99.23	85.49	83.48
TNX 1D	3674786.5	428998.7	156.7	98.39	99.6	79.6
TNX 2D	3674762.6	429049.5	155.3	154.1	102.8	82.8
TNX 3D	3674755.3	429150.9	154.5	152.8	104.9	84.9
TNX 4D	3674729.9	429237.2	150.0	151.9	105.5	85.5
TNX 5D	3674753.3	429273.2	149.5	147.5	108.5	88.5
TNX 6D	3674696.6	429339.0	150.7	147	109.8	89.8
TNX 7D	3674885.6	429070.2	151.1	148.2	103.6	83.6
TNX 8D	3674439.6	429051.0	100.5	148.6	94	74
TNX 9D	3674484.7	429009.7	101.9	98	95.4	75.4

APPENDIX B

WSRC-TR-2003-00250. REVISION 0

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
TNX 10D	3674539.7	428977.6	102.5	99.4	97	77
TNX 11D	3674588.7	428941.4	100.3	100	93.2	73.2
TNX 12D	3674688.9	428872.5	99.4	97.7	93.1	73.1
TNX 13D	3674460.0	428949.6	97.3	97.1	89.9	87.9
TNX 14D	3674487.9	428941.5	95.2	93.4	87.8	85.8
TNX 15D	3674515.5	428933.1	97.7	92.1	87.9	85.9
TNX 16D	3674539.5	428919.4	93.4	92.5	88.1	86.1
TNX 17D	3674662.3	428843.4	96.8	92.7	91.7	89.7
TNX 18D	3674429.6	428956.4	94.1	94	86.9	84.9
TNX 19D	3674390.8	428966.0	94.7	91.2	86.9	84.9
TNX 20D	3674375.0	428969.0	95.4	91.2	88.2	86.2
TNX 21D	3674343.8	428994.6	94.3	91.4	88.9	86.9
TNX 22D	3674265.6	429022.9	95.0	92.5	87.8	85.8
TNX 23D	3674778.4	429090.5	155.3	90.5	104.8	84.82
TNX 24D	3674911.7	429211.8	143.3	152.8	113.7	98.74
TNX 26D	3674413.1	429101.4	100.8	139.7	90.1	87.8
TNX 27D	3674663.5	429054.1	110.6	97.1	101.27	81.27
TNX 28D	3674618.5	428917.4	99.8	108.27	92.6	82.6
TNX 29D	3674602.1	428925.8	100.2	97.4	93	83
TNX 30D	3674522.8	428989.9	103.0	97.6	95.6	85.6
TNX 31D	3674502.2	429006.5	102.9	100.3	95.4	85.4
TNX 32D	3674473.1	429022.3	101.2	100.2	93.9	83.9
TNX 33D	3674454.4	429038.3	100.9	98.5	93.7	83.7
TNX 34D	3674430.2	429069.3	100.2	98.3	93.2	83.2
TNX 35D	3674419.2	429086.2	99.9	97.5	92.5	82.5
TNX 36D	3674395.4	429118.0	99.9	97.4	92.6	82.6
TNX 37D	3674379.8	429133.7	100.7	97.3	93.5	83.5
TRW 1	3674719.9	429140.5	156.3	98.2	106.4	81.4
TRW 2	3674718.0	429087.8	154.3	154.4	112.2	77.2
TRW 3	3674772.5	429123.9	154.5	152.5	112.3	77.4
TRW 4	3674827.1	429136.9	150.9	152.2	111.9	81.9
XSB 1	3674704.3	429134.5	155.0	148.9	112	92
XSB 1D	3674696.0	429137.7	156.2	153.4	107.9	87.9
XSB 2	3674684.8	429166.4	154.1	153.9	113.5	93.5
XSB 2D	3674678.7	429123.7	155.0	152.1	104	84
XSB 4	3674668.6	429141.7	153.5	153	114.3	94.3
XSB 4D	3674657.6	429140.3	155.2	152.9	103.9	83.9
XSB 6	3674575.2	429111.5	101.5		92.73	82.73
YSB 1A	3674874.3	429352.9	145.9	143.4	128.4	98.4
YSB 2A	3674844.2	429390.4	144.8	142.7	127.7	97.7
YSB 3A	3674790.0	429394.1	144.2	141.7	126.7	96.7
YSB 4A	3674827.0	429361.3	144.8	142.6	127.6	97.6
YSC 1D	3685217.8	439933.4	274.4	272.8	236.8	216.8
YSC 2D	3685303.3	439973.4	284.3	282	218	197.9
Z 1	3682424.5	437105.9	281.2	279.7	218.1	217.6

APPENDIX B**WSRC-TR-2003-00250. REVISION 0**

WELL	UTM North	UTM East	Elevation Reference	Elevation Ground	Elevation Sz top	Elevation Sz bot
Z 2	3682110.3	437417.4	257.3	255.5	214.5	214
Z 3	3681852.1	436906.8	261.0	259.1	207.1	206.6
Z 8	3682281.0	436691.3	280.0	277.5	214.1	213.6
Z 9	3682368.0	436245.7	279.5	277.4	227.5	207.5
Z 20	3680240.4	435213.4	241.4	239.4	193.4	173.4
Z 20B	3680241.2	435212.3	243.6	241.1	195.6	175.6
ZBG 1	3684777.6	440150.1	291.4	288.9	240.1	220
ZBG 2	3685014.4	440689.6	278.1	275.8	230.9	210.9
ZDT 1	3683476.5	440920.4	265.3	263	247	227
ZDT 2	3683479.5	440897.5	265.2	263.1	245.1	225.1
ZW 2	3683784.3	436653.8	289.0	286.7	204.8	194.8
ZW 3	3684277.6	437308.3	259.4	257.9	205.1	194.6
ZW 4	3683425.6	437732.0	274.8	270.2	239.7	229.2
ZW 5	3682626.1	437617.4	277.8	273.5	231	221
ZW 6	3682244.1	436886.3	268.1	266.9	227.2	216.7
ZW 7	3682799.2	439599.0	272.4	270.1	264.8	254.5
ZW 8	3683033.2	440748.1	273.4	272.4	264.1	254.1
ZW 9	3683193.2	439726.6	288.7	285.7	252.4	242.4
ZW 10	3683555.5	440217.0	300.4	297.6	252.2	242.2

Westinghouse Savannah River Company

Document Approval Sheet

DOE Contact: Les Germany

Title <u>An Updated Regional Water table of the Savannah River Site and Related Coverages</u>		Document No. <u>WSRC-TR-2003-00250, Rev. 0</u>	
Primary Author/Contact <u>Robert A. Hiergesell</u>		Location <u>773-A2A</u>	Phone No. <u>5-5219</u>
Organization Code <u>L0421</u>		Organization (No Abbreviations)	
Other Authors <u>William E. Jones</u>		Key Words (list 3) <u>Water table, Groundwater, Regional</u>	
Has an invention disclosure, patent application or copyright application been submitted related to this information? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, date submitted _____			
Disclosure No. (If Known) _____ Title _____			
If no, do you intend to submit one? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, projected date _____			
Information Product Description <input checked="" type="checkbox"/> Technical Report <input type="checkbox"/> Semiannual <input type="checkbox"/> Annual <input type="checkbox"/> Final <input type="checkbox"/> Topical <input type="checkbox"/> Other _____ <input type="checkbox"/> Administrative Report <input type="checkbox"/> Semiannual <input type="checkbox"/> Annual <input type="checkbox"/> Final <input type="checkbox"/> Topical <input type="checkbox"/> Other _____ <input type="checkbox"/> Videotape/Multimedia <input type="checkbox"/> External Web Page URL _____ <input type="checkbox"/> Brochure/Booklet <input type="checkbox"/> Procedure/User Guide <input type="checkbox"/> Drawing <input type="checkbox"/> Software Package (for submission to ESTSC)			
<input type="checkbox"/> Journal Article Journal Name _____ <input type="checkbox"/> Book/Book Chapter Book Name _____ Conference Submission* <input type="checkbox"/> Abstract <input type="checkbox"/> Conf. Paper <input type="checkbox"/> Conf. Proceeding <input type="checkbox"/> Slides/poster/display <input type="checkbox"/> Other _____ *Conference Title _____ *Conference Location (City, State, Country) _____ *Conference Dates _____ m/d/y thru _____ m/d/y *Conference Sponsor _____			
References <input checked="" type="checkbox"/> Approved for Release/Publicly Available <input type="checkbox"/> Included as Attachment(s) <input type="checkbox"/> Routing Concurrently <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> STI Concurrence <u>yes</u>			
I understand that for the information in this material to be given external distribution, approvals by both WSRC and, as appropriate, DOE-SR are required. Distribution (verbally or published) must be in accordance with policies set forth in WSRC management requirements and procedures (MRP 3.25) and in DOE-SR orders, and the content of the external distribution must be limited to that actually approved. <u>Robert A. Hiergesell</u> <u>Robert A. Hiergesell</u> <u>12/3/03</u> Author's Name (Print) Author's Signature Date			
Approvals by Author's Organization			
Derivative Classifier <u>M.K. Harris</u>	Classification <u>u</u>	Topic <u>Environmental</u>	
Intended Distribution <input checked="" type="checkbox"/> Unlimited (release to public) <input type="checkbox"/> Limited (see explanation)	Explanation for Limited Dist. <input type="checkbox"/> Site Use Only <input type="checkbox"/> Corporate/University Partner <input type="checkbox"/> Other DOE facility(ies) only <input type="checkbox"/> Other _____		
I understand and have considered whether any potential intellectual property rights (patents, copyrights, etc.), in accordance with MP 1.09 and MRP 1.07) or any contractual barriers (CRADAs, Work for Others, etc.) may be involved before authorizing that this document be proposed for public release. If any concerns were identified, these have been discussed and resolved with General Counsel. <u>M.K. Harris</u> <u>BFB</u> <u>MC Harris</u> <u>12/10/03</u> Manager's Name (Print) Manager's Signature Date			
WSRC Classification Office Reviews		WSRC Classification Officer/Analyst	
Classification/EC/OPSEC <input type="checkbox"/> Overall <input type="checkbox"/> S <input type="checkbox"/> C <input type="checkbox"/> UONI <input checked="" type="checkbox"/> U <input type="checkbox"/> Title <input type="checkbox"/> S <input type="checkbox"/> C <input type="checkbox"/> UONI <input checked="" type="checkbox"/> U <input type="checkbox"/> Export Control Concerns <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> OPSEC Concerns <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Name _____ Signature <u>ALG</u> Comments <u>12/17/03</u> THIS DOCUMENT HAS NO INFORMATION SECURITY CONCERNS. <u>R.L. SHANKLE - DC, OPSEC, ECO</u> LEAD, WSRC INFORMATION SECURITY GROUP	
Export Control Review (If different than above)		OPSEC Reviewer (If different than above)	
Name _____		Name _____	
Signature _____	Date _____	Signature _____	Date _____
Computer Security			
Signature <u>NA</u>			Date _____
STI Program Use Only <input checked="" type="checkbox"/>			
OSTI Subj. Category No. <u>54</u>		Routing <u>EC/Class/OPSEC/DOE/OCI</u>	



Gregg Layne

To: STI@SRS
cc: Marcia Delmore/DOE/Srs@Srs, Tina Difranco/DOE/Srs@Srs, S
Sanders/DOE/Srs@Srs
Subject: Fw: WSRC-TR-2003-00250

12/30/2003 11:24 AM

Having been previously approved by OPSEC and Export Control, there are no specific CI issues pertaining to the release of this document. Therefore, this document is CI Approved for release.

Gregg Layne
CI Officer
OCI-SRS
(803) 725-9635

—— Forwarded by Gregg Layne/DOE/Srs on 12/30/2003 11:22 AM ——

STI
Sent by: Catherine
Witker

To: Office of Counterintelligence@Srs
cc:
Subject: WSRC-TR-2003-00250

12/30/2003 08:32 AM

For STI review. Click here to review document  and then **FORWARD** back to **STI @ Srs**.

Thank you.

Scientific and Technical Information
703-43A

Westinghouse
Savannah River Company
Aiken, SC 29808



WSRC-TR-2003-00250
D&IS-2003-03040

December 28, 2003

Ms. W. F. Perrin, Technical Information Officer
U. S. Department of Energy - Savannah River Operations Office

Dear Ms. Perrin:

REQUEST FOR APPROVAL TO RELEASE SCIENTIFIC/TECHNICAL INFORMATION

The attached document is submitted for classification and technical approvals for the purpose of external release. Please complete Part II of this letter and return the letter to the undersigned by 1/8/2004. The document has been reviewed for classification and export control by a WSRC Classification staff member and has been determined to be Unclassified.


Jeanette Brooks, WSRC Management Information Programs Manager

I. DETAILS OF REQUEST FOR RELEASE

Document Number: WSRC-TR-2003-00250

Author's Name: R. A. Mergesell

Location: 773-42A

Phone: 6-5219

Department:

Document Title: An Updated Regional Water Table of the Savannah River Site and Related Coverages

Presentation/Publication:

Meeting/Journal:

Location:

Meeting Date:

*OSTI Reportable
DOE controls see Germany*

II. DOE-SR ACTION

Date Received by TIO 12/31/2003

- | | |
|---|--|
| <input type="checkbox"/> Approved for Release | <input type="checkbox"/> Not Approved |
| <input checked="" type="checkbox"/> Approved Upon Completion of Changes | <input type="checkbox"/> Revise and Resubmit to DOE-SR |
| <input checked="" type="checkbox"/> Approved with Remarks | |

Remarks: So long as release is not precluded by the latest review including computer security. See changes marked on pages 4, 11, 12, 14, and 19 attached.

W. F. Perrin, Technical Information Officer, DOE-SR


Date 1/2/2004 gek

THE WSRC TEAM

Westinghouse Savannah River Company LLC • Bechtel Savannah River, Inc. • BNFL Savannah River Corporation
BWXT Savannah River Company • CH2 Savannah River Company • Foster Savannah River Company

Changes made per DOE review. Approved for release. JW 1/9/04

ANNOUNCEMENT OF U. S. DEPARTMENT OF ENERGY (DOE)
SCIENTIFIC AND TECHNICAL INFORMATION (STI)

RECORD STATUS (select one):

☒ New ☐ Revised Data ☐ Revised STI Product

Part I: STI PRODUCT DESCRIPTION

A. STI PRODUCT TYPE (select one)

☒ 1. Technical Report

a. Type: ☒ Topical ☐ Semiannual ☐ Annual ☐ Final ☐ Other (specify) _____

b. Reporting Period (mm/dd/yyyy) _____ thru _____

☐ 2. Conference

a. Product Type: _____ Conference Proceedings _____ Conference Paper or Other (abstracts, excerpts, etc.) _____

b. Conference Information (title, location, dates) _____

☐ 3. Software Manual (The actual software package should be made available simultaneously. Follow instructions provided with ESTSC F 1 and ESTSC F 2.)

☐ 4. Journal Article

a. Type: ☒ Announcement citation only ☐ Preprint ☐ Postprint

b. Journal Name _____

c. Volume _____ d. Issue _____ e. Serial identifier (e.g., ISSN or CODEN) _____

☐ 5. S&T Accomplishment Report

☐ 6. Book

☐ 7. Patent Application

a. Date Filed (mm/dd/yyyy) ____/____/____

b. Date Priority (mm/dd/yyyy) ____/____/____

c. Patent Assignee _____

☐ 8. Thesis/Dissertation

B. STI PRODUCT TITLE An Updated Regional Water Table of the Savannah River Site and Related Coverages

C. AUTHOR(s) R. A. Hiergesell

E-mail Address(es): _____

D. STI PRODUCT IDENTIFIER

1. Report Number(s) WSRC-TR-2003-00250

2. DOE Contract Number(s) DE-AC09-96SR18500

3. R&D Project ID(s) _____

4. Other Identifying Number(s) _____

E. ORIGINATING RESEARCH ORGANIZATION Savannah River Site

F. DATE OF PUBLICATION (mm/dd/yyyy) 3/9/2004

G. LANGUAGE (If non-English) English

(Grantees and Awardees: Skip to Description/Abstract section at the end of Part I)

H. SPONSORING ORGANIZATION _____

I. PUBLISHER NAME AND LOCATION (if other than research organization) _____

Availability (refer requests to [if applicable])

J. SUBJECT CATEGORIES (list primary one first) 54

Keywords water table, groundwater, regional, Hydrogeology

K. DESCRIPTION/ABSTRACT

A new regional-scale map of the water table configuration beneath the Savannah River Site and its surrounding area has been developed. This map is an update to the regional water table map presented in 1998. While similar methods were used to develop the updated coverages, increased accuracy was achieved due to several factors, including: a) more data (new wells and additional measurements), b) use of median versus mean water levels for water table contour development, c) culling erroneous values from the data records, and d) eliminating wells discovered to not reflect natural conditions.

US DEPARTMENT OF ENERGY
ANNOUNCEMENT OF U. S. DEPARTMENT OF ENERGY (DOE)
SCIENTIFIC AND TECHNICAL INFORMATION (STI)

DOE F 241.1 (p. 2 of 2)

Part II: STI PRODUCT MEDIA/FORMAT and LOCATION/TRANSMISSION

A. MEDIA/FORMAT INFORMATION

1. Medium of STI product is: ☐ Paper ☐ Electronic document ☐ Computer medium ☐ Audiovisual material
2. Size of STI product _____
3. File format:
 - a. If electronic document is posted at site, indicate: ☐ html ☒ pdfn ☐ sgml ☐ xml
 - b. If electronic document is transmitted to OSTI, indicate: ☐ html ☐ pdfn ☐ pdfi ☐ msword
____ TIFFG4 ____ WP—indicate Version (5.0 or greater) _____ platform/operating system _____
____ MS Word—indicate Version (5.0 or greater) _____ platform/operating system _____ Postscript
4. If computer medium or audiovisual material:
 - a. Quantity/type (specify) _____
 - b. Machine compatibility (specify) _____ c. Sound: ____ (yes) d. Color ____ (yes) e. Tables/Graphics ____ (yes)
 - f. Other information about product format a user needs to know: _____

B. LOCATION/TRANSMISSION INFORMATION

1. STI Product is available at site: Unique URL (of specific STI Product) http://sti.srs.gov/fulltext/tr2003250/tr2003250.pdf
2. STI Product is being transmitted to OSTI:
 - a. ____ Electronically via FTP
 - b. ____ Via Mail or shipment (e.g., Federal Express) (Paper products, electronic documents on CD-ROM, diskettes, videocassettes, etc.)
3. Information Product Filename (of transmitted electronic format) _____

C. ADDITIONAL INFORMATION (concerning media/format or location/transmission; for OSTI internal use only): _____

(Grantees and Awardees: Skip to Contact section at the end of Part III)

Part III: STI PRODUCT REVIEW? RELEASE INFORMATION

A. ACCESS LIMITATION

- ☒ 1. Unlimited Announcement (available to U.S. and non-U.S. public)
- ☐ 2. OpenNet (use OpenNet guidance for below):
- a. If additional source other than making it available through NTIS:
 - (1) Accession Number _____
 - (2) Document Location _____
 - b. Field Office Acronym _____
 - c. Declassification date (mm/dd/yyyy) ____/____/____
 - d. Declassification Status:
____ Declassified ____ Sanitized ____ Never classified
 - e. OpenNet Document Type _____
 - f. OpenNet Document Keywords _____
 - g. OpenNet Addressee _____
3. U.S. Dissemination Only
4. Copyrighted material; Are there any restrictions based on copyright? ____ yes ____ no. If yes, list the restrictions _____
5. Small Business Innovation Research (SBIR) Release date (mm/dd/yyyy) _____
6. Small Business Technology Transfer (STTR) Release date (mm/dd/yyyy) _____
7. Proprietary/Trade Secret
8. Patent Pending
9. Protected data ____ CRADA ____ Other (specify) _____ Release date (mm/dd/yyyy) _____
10. Official Use Only (OUO)
11. Program-Directed Special Handling (specify) _____
12. Export Control/ITAR/EAR
13. Unclassified Controlled Nuclear Information (UCNI) _____
14. Classified Classification Level/Category of:
 - a. This form U
 - b. The STI Product Unclassified
15. Other information relevant to access (specify; for OSTI internal use only) _____

B. OTHER (information useful to include in published announcement record which is not suited for any other field on this form) _____

C. CONTACT AND RELEASING OFFICIAL

1. Contact (if appropriate, the organization or site contact to include in published citations who would receive any external questions about the content of the STI Product or the research information contained therein)

Name and/or Position Jeanette Brooks, Manager, WSRC Management Information Programs

E-mail _____ Phone (803) 725-2500

Organization Westinghouse Savannah River Company

2. Releasing Official ☒ I verify that all necessary reviews have been completed (e.g. Patent, Copyright, ECI, UCNI, etc.)

Released by (name) Jeanette Brooks Date (mm/dd/yyyy) 3/9/2004 (803) 725-2500

E-Mail _____ Phone _____