Groundwater Flow Model for the B-Reactor Area Final Report

by

M. K. Harris

Westinghouse Savannah River Company

Savannah River Site

Aiken, South Carolina 29808

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.

MASTER

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

GROUNDWATER FLOW MODEL FOR THE R-REACTOR AREA

Final Report

Prime Contract No. DE-AC09-96SR18500
Subcontract No. AA82275N

Prepared for:
Westinghouse Savannah River Company
Aiken, SC 29808

November 13, 1997

GROUNDWATER FLOW MODEL FOR THE R-REACTOR AREA

Final Report

Prime Contract No. DE-AC09-96SR18500
Subcontract No. AA82275N

Prepared for:
Westinghouse Savannah River Company
Aiken, SC 29808

Prepared by:
HydroGeoLogic, Inc.
1155 Herndon Parkway, Suite 900
Herndon, VA 20170
Tel: (703) 478-5186

November 13, 1997

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 to DOE and DOE contractors from the Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831; prices available from (615) 576-8401.

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

TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
1.1 R-REACTOR SEEPAGE BASINS	1
1.2 108-4R OVERFLOW BASIN	2
1.3 SURFACE FEATURES	2
2.0 HYDROGEOLOGIC FRAMEWORK	4
2.1 SRS GEOLOGY	4
2.2 HYDROSTRATIGRAPHY OF THE SRS	4
2.2.1 Meyers Branch Confining System	4
2.2.2 Floridan Aquifer System	4
2.2.2.1 Gordon Aquifer	4
2.2.2.2 Gordon Confining Unit	5
2.2.2.3 Upper Three Runs (Water Table) Aquifer	5
2.3 UNIT-SPECIFIC GEOLOGY AND HYDROGEOLOGY	5
2.3.1 Unit Specific Hydrostratigraphy	6
2.3.1.1 "Tan Clay" Interval	6
2.3.1.2 Undifferentiated High Permeability (Transmissive) Zone	7
2.3.1.3 "AA Horizon"	7
2.3.1.4 "A" Horizon	7
2.3.1.5 Undifferentiated Surface Soils	8
2.4 UNIT-SPECIFIC HYDROGEOLOGY	8
3.0 DATA DESCRIPTION	9
3.1 MONITORING WELL AND BOREHOLE	9
3.2 LABORATORY	9
3.3 CONE PENETROMETER	9
3.4 TOPOGRAPHIC SURFACE	10
4.0 DELINEATION OF HYDROSTRATIGRAPHIC UNITS	11
4.1 PEN BRANCH FAULT	11
4.2 HYDROSTRATIGRAPHIC SURFACES	11
5.0 GROUNDWATER FLOW MODEL DEVELOPMENT	13
5.1 MODEL DISCRETIZATION	13
5.2 BOUNDARY CONDITIONS	13
5.3 CONDUCTIVITY FIELD	15
5.3.1 Mini-Permeability and Laboratory Permeability	16
5.3.2 Mud Fraction Correlation	16
5.3.3 CPT Correlation	16
6.0 GROUNDWATER FLOW MODEL RESULTS	18
6.1 MODEL CALIBRATION	18
6.2 HEAD RESIDUALS	19
6.3 GROUNDWATER RECHARGE/DISCHARGE	19
6.4 GROUNDWATER FLOW PATTERNS	19

TABLE OF CONTENTS

	Page
7.0 CONCLUSIONS	21
8.0 REFERENCES	22

APPENDICES

Appendix A: Hydraulic Head Data and Residuals

Appendix B: Borehole and CPT Data

Appendix C: Core Mud Fraction Plots

Appendix D: Laboratory Data

Appendix E: Hydrostratigraphic Data

Appendix F: Conductivity Inferred from Core, Laboratory Permeability, and CPT Data

Appendix G: Model Calibration Runs

LIST OF TABLES

	Page
Table 4.1 Offsets South of Pen Branch Fault	77
Table 6.1 Mud Fraction Correlations and Anisotropy Ratios	78
Table 6.2 Friction Ratio Transition Intervals	78
Table 6.3 Mini-Permeability Anisotropy Ratios	78
Table 6.4 Calibration Zones	79
Table 6.5 Summary of Modifications to Initial Conductivity Field	79
Table 6.6 Calibrated Model Average Conductivities	80
Table 6.7 Average residual and RMS	80
Table 6.8 Comparison of Measured and Simulated Stream Baseflow	81
Table 6.9 Seeds for 3-D Pathlines	81

LIST OF FIGURES

	Page
Figure 1.1 R-Reactor Area	24
Figure 2.1 Geologic and Hydrogeologic Units for the Savannah River Site.	25
Figure 3.1 Name and Location of Borehole and CPT Data	26
Figure 3.2 Monitoring Well, Borehole, and CPT Locations	27
Figure 3.3 3302 Maps Obtained from WSRC	28
Figure 3.4 Topographic Surface	29
Figure 4.1 Model Area and Pen Branch Fault	30
Figure 4.2 Top of Crouch Branch Confining Unit Surface Trend (Prior to faulting) . . .	31
Figure 4.3 Top of Gordon Aquifer Surface Trend (Prior to faulting)	32
Figure 4.4 Top of Gordon Aquifer (Prior to faulting)	33
Figure 4.5 Top of Gordon Confining Unit Surface Trend (Prior to faulting)	34
Figure 4.6 Top of Gordon Confining Unit (Prior to faulting)	35
Figure 4.7 Top of "lower" Aquifer Zone (Prior to faulting)	36
Figure 4.8 Top of "tan clay" Confining Zone (Prior to faulting)	37
Figure 4.9 Top of Transmissive Zone Surface Trend	38
Figure 4.10 Top of Transmissive Zone	39
Figure 4.11 Top of "AA" Horizon	40
Figure 4.12 Top of "A" Horizon	41
Figure 5.1 Estimated Water Table and Model Boundary	42
Figure 5.2 R-reactor Area Active mesh Elements	43
Figure 5.3 Mesh Cross-Section at I=25	44
Figure 5.4 Top Boundary Conditions	45
Figure 5.5 Estimated Crouch Branch Aquifer Head	46
Figure 5.6 Vertical Boundary Conditions	47
Figure 5.7 Estimated Gordon Aquifer Head	48
Figure 5.8 Estimated "lower" Aquifer Zone Head	49
Figure 5.9 K-Field Flow Chart	50
Figure 5.10 K_h Distribution for Gordon Aquifer, Element Layer 1	51
Figure 5.11 K_v Distribution for Gordon Confining Unit, Element Layer 4	52
Figure 5.12 K_h Distribution for "lower" Aquifer Zone, Element Layer 6	53
Figure 5.13 K_v Distribution for "tan clay" Confining Zone, Element Layer 7	54
Figure 5.14 K_h Distribution for Transmissive Zone, Element Layer 10	55
Figure 5.15 K_v Distribution for "AA" Horizon, Element Layer 13	56
Figure 5.16 K_v Distribution for "A" Horizon, Element Layer 16	57
Figure 5.17 K_v Distribution for Surface Soil, Element Layer 19	58
Figure 5.18 K_h Distribution at I=25	59
Figure 5.19 K_v Distribution at I=25	60

LIST OF FIGURES

	Page
Figure 6.1 Calibration Zones	61
Figure 6.2 Gordon Aquifer and "lower" Aquifer Zone Residuals	62
Figure 6.3 "AA" Horizon Residuals	63
Figure 6.4 "A" Horizon Residuals	64
Figure 6.5 Surface Soil Residuals	65
Figure 6.6 Simulated Groundwater Recharge (discharge)	66
Figure 6.7 Discharge Zones	67
Figure 6.8 Simulated Head in Gordon Aquifer	68
Figure 6.9 Simulated Head in "lower" Aquifer Zone	69
Figure 6.10 Simulated Head in Transmissive Zone	70
Figure 6.11 Simulated Water Table	71
Figure 6.12 Simulated Head at I=25	72
Figure 6.13 Simulated Saturation at I=25	73
Figure 6.14 R-Reactor Area Pathlines with 50 Year Markers	74
Figure 6.15 Pathlines with 50 Year Markers (facing north)	75
Figure 6.16 Pathlines with 50 Year Markers (facing west)	76

1.0 INTRODUCTION

A detailed numerical groundwater flow model has been developed for the R-Area of the Savannah River Site in Aiken, South Carolina. The three-dimensional, finite-element groundwater modeling code FACT (Flow and Contaminant Transport) has been used for this study. The code was developed by the Savannah River Technology Center and is based upon numerical algorithms contained in the code SAFT3D, which was developed by HydroGeoLogic, Inc. The necessary QA/QC has been completed on this code (WSRC, 1995). The model incorporates lithological descriptions, cone penetrometer data, mini-permeameter data, and hydraulic head data. The model encompasses an area that surrounds the R-Reactor Area. The area of interest for this model is the R-Reactor Seepage Basins. However the model can be used for other waste units within the R-Reactor Area.

One objective of this study is to develop a detailed flow model to guide future characterization efforts. In the past, groundwater flow models have been developed after the characterization of a waste unit is complete. Only the initial characterization for the R-Reactor Seepage Basins has been completed. This model study will identify data gaps and lead to recommendations for further characterization that will be completed as part of the Phase II characterization of the area.

A second objective of the model development is to provide a foundation for future contaminant transport simulations. Transport modeling of the contaminants of concern will be addressed under the next phase of groundwater modeling. This phase will incorporate the new characterization data.

1.1 R-REACTOR SEEPAGE BASINS

The R-Reactor Seepage Basins are six unlined basins (excavated 6.6 feet to 16.4 feet below land surface [ft bls]) located in the abandoned reactor construction staging area north of the R-Reactor building (105-R). The basins were constructed and operated between 1957 and 1964 and received low-level radioactive wastewater (an estimated 4,808,440 gallons), via process sewer line, from purges of the R-Reactor disassembly basin (Pekkala et al., 1987). These purges were necessary to keep the tritium concentration in the disassembly basin water below the level that ensures safe working conditions. The primary radionuclides present in the purge water were tritium (as HTO), Strontium-90 (^{90}Sr) and Cesium-137 (^{137}Cs).

R-Reactor began operation in 1953. In 1957, a calorimeter experiment failure occurred, and purge water containing high-level radioactive contamination were released to the emergency disassembly basin. Subsequent purging of water from the disassembly basin resulted in approximately 2700 Curies (Ci) of activity being released primarily to basin 1, and to a lesser extent, basins 2-4 (basins 2-6 were placed in operation after the incident). It is estimated that the 2700 Ci was composed of 200 Ci of ^{90}Sr , 1000 Ci of ^{137}Cs , and 1500 Ci of other non-volatile beta emitters (primarily radionuclides with half-lives less than 3 years).

Basin 1 was deactivated and backfilled in January 1958 because of surface outcrop and leakage to an abandoned construction sewer line system left from the former use of the area as a reactor construction staging area. In 1960, basins 2-5 were deactivated and backfilled. The ground surface above basins 1-5 was treated with herbicide and covered with a thin layer of asphalt emulsion. In addition, a kaolinite dike (down to the clay layer) was constructed around basin 1 and the northwest end of basin 3 to contain lateral movement of radionuclides. Clay caps were placed

over the diked areas to control exposure to radioactivity contaminated soils and infiltration of surface water. Basin 6 was last used in 1964 and backfilled in 1977. All basins were backfilled with kaolin.

Environmental monitoring, including limited soil sampling, extensive groundwater monitoring, and vegetation sampling surveys, have been conducted since 1957. Based on numerous sampling surveys, it has been concluded that radionuclides have migrated out of the seepage basins via percolation and through the abandoned construction sewer line. Studies indicate that this line has been breached and acted as a conduit for the migration of radionuclides.

Radionuclide activities in basin soils have been encountered up to 8,000 nanoCuries per gram (nCi/g) ^{137}Cs and 41 nCi/g ^{90}Sr . Vegetation activities up to 32 nCi/g ^{137}Cs and 16 nCi/g ^{90}Sr have been detected. Tritium, gross alpha, non-volatile beta, cadmium, and lead have been detected in the groundwater above drinking water standards.

The R-Reactor Seepage Basins were covered in 1996 with asphalt to minimize plant and animal intrusion. The asphalt cover also substantially reduces percolation of rain water. However, to simulate initial conditions the asphalt cover was not included in the groundwater flow model for this phase.

1.2 108-4R OVERFLOW BASIN

The 108-4R Overflow Basin is located 250 feet southwest of building 105-R and approximately 500 feet southwest of R-Reactor Seepage Basins. This basin was constructed to collect incidental overflow from two adjacent underground storage tanks. It was in operation from 1953 to 1964. Original dimensions of the unlined basin were approximately 60 feet x 60 feet x 8 feet deep. A soil berm up to 2 feet above grade was placed around the basin's perimeter.

The basin was removed from service in 1964 and is presently inactive. It is partially filled with an estimated 5 feet of sediment. Soil sampling results from the basin indicate that the soils contain elevated concentrations of petroleum hydrocarbons (maximum total petroleum hydrocarbons [TPH] value 4,750 ppm) and benzene, toluene, ethylbenzene, and xylene (BTEX) compounds (up to 40 ppm).

1.3 SURFACE FEATURES

R Area is located in the east-central part of SRS approximately 8.3 km (5.2 miles) from the nearest SRS boundary and 2.7 km (1.7 miles) northeast of Par Pond. The RRSBs lie north of and adjacent to R Reactor on an elevated divide between Mill Creek and the primary effluent canal northeast of the R-Area perimeter fence (see Figure 1.1). Topographic relief in this area is low, generally between elevations of 88.4 m (290 ft) and 91.4 m (300 ft) msl. Access to the RRSBs is from an unpaved road just off Road G-1. The Overflow Basin is located southwest of the 105-R building and approximately 152.4 m (500 ft) southwest of the RRSBs, and can be accessed inside the 105-R perimeter fence.

Figure 1.1 shows the drainage basins and drainage patterns, resulting from the gentle topography in the area, as well as surface water bodies potentially affected by the Unit. There are no surface water bodies on the Unit itself nor are Carolina bays present in the vicinity of R Reactor. Surface runoff from the RRSBs flows either north and west into Mill Creek or east into the R-Effluent

Canal. Mill Creek is part of the Tinker Creek Basin and the R-Effluent Canal is part of Par Pond Basin. The Par Pond Basin receives surface runoff flowing east, south and southwest from the R-Reactor area.

2.0 HYDROGEOLOGIC FRAMEWORK

2.1 SRS GEOLOGY

The SRS is underlain by sediment of the Atlantic Coastal Plain. The Atlantic Coastal Plain consists of a southeast-dipping wedge of unconsolidated and semi-consolidated sediment that extends from its contact with the Piedmont province at the Fall Line to the edge of the continental shelf. The sediment ranges from Late Cretaceous to Miocene in age and comprises layers of sand, muddy sand, and mud with subordinate calcareous sediment. The sediment rests uncomfortably on crystalline and sedimentary basement rock.

Only the hydrostratigraphy will be discussed in this report. Detailed descriptions of the geology of the SRS can be found in several recent reports (Colquhoun and others, 1983; Fallaw and others, 1990; Aadland and others, 1991; Dennehy and others, 1989; Logan and Euler, 1989; Fallaw and Price, 1995).

2.2 HYDROSTRATIGRAPHY OF THE SRS

The hydrostratigraphy of the SRS has been subject to several different classifications. This report incorporates the hydrostratigraphic nomenclature currently established for the SRS vicinity by Aadland and others (1995). The nomenclature is correlated with the local lithostratigraphy in Figure 2.1. A thorough description and review of the hydrostratigraphy of the SRS region are available in Aadland and others (1995). This report address the up-dip part of the Floridan aquifer system and the top of the Meyers Branch Confining System as defined by Aadland and others (1995)(Figure 2.1).

2.2.1 Meyers Branch Confining System

The Meyers Branch Confining System defines the base of the Floridan aquifer system in the study area. The top of the Meyers Branch Confining System is delineated by the laterally continuous, dense, gray to black, clay and sandy clay of the Lang Syne Formation of the Black Mingo Group (Figure 2.1) (Aadland and others, 1991, 1995).

2.2.2 Floridan Aquifer System

2.2.2.1 Gordon Aquifer

The lowermost unit that is characterized in this report is the Gordon aquifer (Figure 2.1). The Gordon aquifer constitutes the basal unit of the Floridan aquifer system in this part of the SRS Region. The Gordon aquifer is made up of the loose sand and clayey sand of the Congaree Formation and, where present, the sandy parts of the underlying Fishburne and Williamsburg Formations (Figure 2.1) (Harris and others, 1990; Aadland and others, 1991, 1995). The sand within the Gordon aquifer is yellowish to grayish orange in color and is sub- to well-rounded, moderately to poorly sorted, and medium to coarse-grained. Pebbly layers and zones of iron and silica cement are common. Layers of light tan to gray clay up to three feet in thickness are rare, and thin (less than 6 inches in thickness) layers of clay are often found near the base of this unit. Small amounts of calcareous sediment have been found sporadically within the Gordon aquifer in the study area.

2.2.2.2 Gordon Confining Unit

The Gordon aquifer is separated from the Water Table aquifer by the Gordon confining unit. The unit is commonly referred to as the "green clay" in previous SRS literature and includes sediment of the Warley Hill Formation (Figure 2.1). The unit comprises layers of interbedded silty and clayey sand, sandy clay and clay. The clay is stiff to hard and is often fissile. Glauconite is a common constituent and imparts a distinctive greenish cast to the sediment, hence the informal name "green clay" for this unit. The Gordon confining unit includes some calcareous sediment and limestone, primarily calcarenaceous sand and clayey sand with subordinate calcarenaceous and micritic clay, and sandy micrite and limestone.

2.2.2.3 Upper Three Runs (Water Table) Aquifer

The Water Table aquifer is equivalent to the Upper Three Runs aquifer of Aadland and others (1995). The Water Table aquifer includes all sediment from the ground surface to the top of the Gordon confining unit. The Water Table aquifer incorporates the "upland" unit, the Tobacco Road Sand, Dry Branch Formation, Clinchfield Formation, and Santee Limestone (Figure 2.1). The Water Table aquifer is locally divided into informal "lower" and "upper" aquifer zones separated by the "tan clay" confining zone.

"Lower" Upper Three Runs (LUTR) Aquifer Zone. The "lower" aquifer zone consists of the dominantly fine-grained, well-sorted sand and clayey sand of the Santee Limestone and parts of the Dry Branch Formation beneath the "tan clay" confining zone (Figure 2.1). Descriptions of drill core indicate that the carbonate sediment in this vicinity has a dominant siliciclastic component, and consists of calcarenaceous sand, micritic sand, shelly sand and some sandy calcarenite and shelly limestone.

"Tan Clay" Confining Zone. The "tan clay" confining zone is equivalent to the "tan clay" zone referred to in previous SRS reports. The "tan clay" confining zone includes sediment of the Dry Branch Formation (Figure 2.1). The zone contains light-yellowish tan to orange clay and sandy clay interbedded with clayey sand and sand. The zone contains light-yellowish tan to orange clay and sandy clay interbedded with clayey sand and sand. The lithology of the clay is similar to that of the Twiggs Clay Member, but is dispersed vertically and horizontally and is not continuous over long distances (Harris and others, 1990; Aadland and others, 1991).

"Upper" Upper Three Runs (UUTR) Aquifer Zone. The "upper" aquifer zone consists of all sediment from the ground surface to the top of the "tan clay" confining zone. The "upper" aquifer zone includes the "upland" unit, Tobacco Road Sand, and part of the Dry Branch Formation (Figure 2.1). This unit is characterized by sand and clayey sand with minor intercalated clay layers. The sediment within the "upland" unit is commonly very dense and clayey and contains some gravelly sand.

2.3 UNIT-SPECIFIC GEOLOGY AND HYDROGEOLOGY

A field investigation completed in 1995 and 1996 provided data that allowed the correlation of local and regional geology/hydrology of the Tertiary Aquifer System in the vicinity of the RRSB. Specific field information collected during that investigation included core data, lithologic and stratigraphic data, water level data, geophysical logs, cone penetrometer data, and permeability data. These correlation's and composite lithology/CPT logs were used to develop cross sections

of the shallow strata as well as structure contour and isopach maps of select stratigraphic units. The lithologic data were then used to define the stratigraphy of the Tertiary aquifers for incorporation into the groundwater flow and transport model.

2.3.1 Unit Specific Hydrostratigraphy

Based on the lithologic data collected during the recent investigation, the hydrostratigraphy above the "Tan Clay" has been subdivided into several distinct horizons that are correlatable in the vicinity of the RRSB. These horizons consist of clay and clayey sand which may affect groundwater infiltration and flow within the uppermost saturated zone. These horizons are termed, from deepest to shallowest shallowest to deepest: - the "Tan Clay" interval, an undefined high permeability zone, the "AA" horizon; the "A" horizon; and the undifferentiated surface soil (Figure 2.1). Appendix E contains elevations and thickness' for the "A" and "AA" horizons, the undefined high permeability zone and the "Tan Clay" interval. Cross-sections, structure and isopach maps are available in WSRC (1997b) The following summaries describe the occurrence and nature of these horizons in the vicinity of the RRSB. All of these data were incorporated to the groundwater flow model.

2.3.1.1 "Tan Clay" Interval

In the study area the "Tan Clay" represents a semi-confining zone. The clay occurs as lenses and is interbedded with sands, silty sands, clayey sands, and sandy clays. For hydrostratigraphic purposes in this report the "Tan Clay" zone is referred to as an interval.

The upper surface of the "Tan Clay" interval occurs at a depth of 30.5 to 38 m (100 to 125 ft) bls, and ranges in elevation between 61.7 and 85.1 m (202.3 and 279.3 ft) msl. The "Tan Clay" interval occurs in a relatively uniform thickness across the site ranging from 7.6 to 8.2 m (20 to 27 ft). The upper contact of the unit is at 61.8 m (202.6 ft) msl in the northwestern portion of the site and decreases in elevation toward the east and south. The lowest elevation of the upper contact of the "Tan Clay" interval is at 52.5 m (175.7 ft) msl at RCH-1 to 47 m (154.3 ft) msl.

The upper and lower boundaries of the "Tan Clay" interval were selected from lithology and CPT analyses. The contact can be distinguished by 'the relatively low tip stress as compared to the overlying "AA" horizon. This characteristic signature indicates a finer grained matrix than in the overlying "AA" horizon. Although the "Tan Clay" includes variable lithology, the unit contacts also correspond to a very high positive deflection in measured pore pressures. The measured pore pressures are fairly low in all uphole sections measured, and the positive deflection within the "Tan Clay" is generally the highest in the CPT holes. In addition, the upper contact of the "Tan Clay" interval corresponds to a positive deflection in the gamma counts.

The materials of the "Tan Clay" interval are described as sand, clayey sand, sandy clay and clay that are poorly to very poorly sorted, very fine grained to pebble sized, and subangular to subrounded. Although clay and sand content vary within the unit, the average sand content for the "Tan Clay" interval in the study area is 79.1% , and the average fines content is approximately 13%. Gravel is common within the horizon, and ranges from 0% to 15% within individual samples. Secondary diagnostic features include clay balls, which are commonly found near the lower contact of the horizon, and common black manganese oxide staining and laminae.

2.3.1.2 Undifferentiated High Permeability (Transmissive) Zone

Underlying the "AA" horizon is a sandy, high-permeability interval. Strata within this interval are predominantly sand to silty sands with interbedded clay and pebble layers. Thickness at the interval ranges from approximately 15.2 m (50 ft) in the western portion of the study area to approximately 7.6 m (25 ft) in the eastern portion of the study area.

2.3.1.3 "AA Horizon"

Underlying the "A" horizon is a more sandy interval that has been termed the "AA" horizon. The upper surface of the "AA" horizon occurs at a depth of 9.1 to 21.3 m (30 to 70 ft) across the site, and ranges in elevation from 69.5 to 82.9 m (228 to 272 ft) msl. Thickness of the horizon ranges from 7 to 8.8 m (23 to 30.5 ft), and averages 7.7 m (25.6 ft).

The upper boundary of the "AA" horizon was selected from CPT analyses because this contact can be distinguished by the relatively high tip resistance as compared to the overlying "A" horizon. These characteristics represents signatures which signify a coarser grained matrix than in the overlying "A" horizon. In addition, the gamma signature within the "AA" horizon is highly variable, indicating interbedded and interlayered sands, silts and clays.

The "AA" horizon is described as clayey sand and sand that is poorly to very poorly sorted, very fine grained to pebble sized, and subangular to subrounded. The color is light red, medium red and light purple at the upper contact of the horizon in coreholes.

2.3.1.4 "A" Horizon

The "A" horizon is the shallowest of the identified hydrostratigraphic units, and appears to act as a shallow semi-confining unit. Several small areas of perched water have historically occurred at the RRSB (above the "A" horizon), and are depicted on historical potentiometric maps. The upper surface of the clayey zone which is designated as "A" horizon, occurs at a depth of 1 to 10 m (3 to 33 ft) bls, and ranges in elevation from 79.7 to 81.3 m (261.5 ft to 299.6 ft) msl. Thickness of the unit ranges from 5.8 m to 14.3 m (19 to 47 ft), and averages 9.2 m (30.2 ft).

The "A" horizon increases in thickness toward the east central portion of the RRSB, and dips to the southeast in the study area. The boundaries of the "A" horizon were selected based on lithology and CPT analyses. The "A" horizon has a characteristic signature of low tip pressure throughout the unit, and a high friction ratio. These characteristic signatures are typical of a fine-grained matrix with some clay. Although the horizon includes sands, very coarse-grained material is almost nonexistent in the section. Sleeve pressures throughout the CPT holes were relatively consistent within the "A" horizon.

The "A" horizon is described as a clayey sand, sandy clay and sand. The color varies, but is described as reddish brown, reddish yellow and brownish yellow near the upper contact of the unit, and grades to gray, grayish purple, and medium purple with depth. Clay balls are common, especially at the middle and basal portions of the unit. The "A" horizon's fine-grained nature and relatively low vertical and horizontal permeabilities will impede downward movement of groundwater compared to the underlying "AA" horizon and deeper coarse-grained zones. Groundwater occurs under water table conditions above and within "A" horizon. The low porosity of the upper portion of the unit likely results in the perched water which occurs in several portions

of the northern section of the study area, creating a apparent radial pattern of groundwater movement above and within the upper portion of the "A" horizon in several of the historical potentiometric maps.

2.3.1.5 Undifferentiated Surface Soils

The shallow surface soil in the vicinity of the Unit consists of interbedded sands, silts, and clays that overlie the "A" horizon. These strata range in thickness from approximately 1.0 to 10 m (3 to 33 ft) and generally thicken from northwest to southeast across the RRSB. These strata are correlatable to the Upland Unit that is of fluvial origin (Aadland et al., 1995).

2.4 UNIT-SPECIFIC HYDROGEOLOGY

The water table aquifer extends to the top of the Gordon Confining Unit as the Upper Three Runs (UTR) Aquifer (Figure 2.1). The water table is divided into upper and lower sections to correspond with the saturated zone above and below the "Tan Clay", respectively. The saturated zone from the water table to the top of the "Tan Clay" interval are identified as the UUTR Aquifer, and the zone between the "Tan Clay" and the Gordon Confining Unit are discussed separately as the LUTR Aquifer.

The UUTR Aquifer is between 24.4 and 30.5 m (80 and 100 ft) thick in the seepage basin area, and includes the "A" horizon, the "AA" horizon, and the undifferentiated materials above the "Tan Clay". As previously discussed, the "A" horizon is semi-confining, and supports perched water zones in several portions of the study area. A majority of the historical water level monitoring data and data collected for this investigation are from the UUTR Aquifer, and typically from wells screened in the "A" horizon. Water level data from the lower section of the UUTR Aquifer is limited, and the hydrology of these portions of the aquifer in the vicinity of the Unit are poorly understood.

The LUTR Aquifer is approximately 18.3 m (60 ft) thick in the vicinity of the RRSBs, and includes interbedded clays, sands, and carbonates. Branch Formation and the Tinker/Santee Formation. Historical and recent water level monitoring data in this portion of the UTR Aquifer is sparse, and therefore the interpretation of the hydrology of these portions of the aquifer in the vicinity of the RRSB is limited.

The "green clay" underlies the LUTR aquifer. There is limited information on the "green clay" in R-Area. The Gordon aquifer underlies the "green clay". The Gordon aquifer is of moderately high hydraulic conductivity and is regional in extent south of Upper Three Runs Creek. Groundwater flow in the Gordon Aquifer is towards Upper Three Runs Creek and the Savannah River, depending upon the location at the SRS.

The Crouch Branch Confining Unit, which represents the top of the Meyers Branch Confining System underlies the Gordon Aquifer. This confining unit is composed of low permeability materials. The Crouch Branch Confining unit is the base of the groundwater flow model.

3.0 DATA DESCRIPTION

3.1 MONITORING WELL AND BOREHOLE

Monitoring well water levels have been monitored on a quarterly basis in the R-Reactor Area. Quarterly monitoring well data from the first quarter of 1986 to the second quarter of 1996 were obtained from WSRC and used to compute an average water level for each monitoring well. The average water levels were calibration targets for the groundwater flow model. Appendix A contains a list of the 55 average water levels at the R-Reactor Area. Monitoring wells RBP-1D, RBP-2D, and RBP-3D were constructed and measured in the second quarter of 1997.

Hydrologic data were obtained from continuous drill cores at 8 boreholes in the R-Reactor Area. Appendix B lists the borehole data. The foot-by-foot description of mud fraction (silt and clay sized material) was used to produce the conductivity field. Appendix C contains plots of mud fraction (smoothed) versus elevation (ft) corresponding to the 8 cores. The dashed lines represent the hydrostratigraphic picks from WSRC (1997b). The raw mud fraction data were smoothed using the following filter which rejects frequencies in the upper half of the spectrum (Hamming, 1973):

$$h_k = \frac{f_{k-3} + 2f_{k-2} + 3f_{k-1} + 3f_k + 2f_{k+1} + f_{k+2}}{12}$$

where f_k is the raw mud fraction data and h_k is the smoothed mud fraction. The no recovery zones found in the raw mud fraction data are assumed to be sandy soils with an average mud fraction of 3%. The no recovery zones were replaced with a 3% mud fraction.

3.2 LABORATORY

Laboratory permeability data from 22 soil samples of the R-Reactor Area are presented in WSRC (1997b). Samples were taken at RCH-1, RPC-1, RPC-2, and RPT-6. Laboratory permeability data at P-20 are presented in Bledsoe (1987). Celeste (1997) performed mini-permeability tests on the following cores: RPC-2CL, RPC-1CL, RCH-1, RBW-2CL, and RBW-2CU. Appendix D presents all the laboratory data.

3.3 CONE PENETROMETER

Cone penetrometer tests (CPT) were conducted adjacent to the R-Reactor seepage basins to collect lithologic information (WSRC, 1997b). Appendix B lists the CPT locations. As the penetrometer probe is forced into the ground, the conical tip and friction sleeve independently measure vertical resistance beneath the tip as well as frictional resistance on the side of the probe as functions of depth. The penetrometer probe also has a pressure transducer in the cone that measure the pore water pressure and a resistivity module that measure variance in soil conductance. The friction ratio, pore pressure, sleeve stress, and tip resistance data were used to produce the conductivity field.

The borehole data and CPT data were analyzed by WSRC (1997b) to determine the stratigraphic layering presented in Appendix E. Figure 3.1 shows the name and location of the borehole and

CPT data. Figure 3.2 shows the location of the monitoring well data, borehole data, and CPT data along with a basemap of the modeled area.

3.4 TOPOGRAPHIC SURFACE

The topographic surface is constructed using USGS Digital Elevation Model (DEM) data and 3302 survey maps. The 3302 maps were digitized near streams and man-made structures and used to supplement the DEM data. The 3302 maps obtained from WSRC are shown in Figure 3.3 and the topographic surface for the R-Reactor Area is shown in Figure 3.4.

4.0 DELINEATION OF HYDROSTRATIGRAPHIC UNITS

The construction of the boundaries of hydrostratigraphic units incorporated regional scale hydrogeologic framework data from (Aadland, et al., 1995) and site scale Phase I investigation data (WSRC, 1997b). The regional scale hydrogeologic framework data includes the following:

- Top of Crouch Branch Confining Unit
- Top of Gordon Aquifer
- Top of Gordon Confining Unit
- Pen Branch fault

The Phase I investigation data includes the following:

- Top of Gordon Aquifer
- Top of Gordon Confining Unit
- Top of "lower" aquifer zone
- Top of "tan clay" confining zone
- Top of transmissive zone
- Top of "AA" horizon
- Top of "A" horizon

4.1 PEN BRANCH FAULT

The Pen Branch fault is located south of the R-Reactor Area and extends east and west of the R-Reactor Area. For convenience, the model area is aligned with the Pen Branch fault, which is a prominent structural feature. The fault is approximated by a straight line in an areal view. Vertically, the fault is modeled as a continuous linear shift of the hydrostratigraphic units over a short interval. The fault offset is assumed constant at a given elevation. Figure 4.1 shows the model area and the Pen Branch fault. Offsets south of Pen Branch fault were estimated from Aadland, et al., 1995 and are given in Table 4.1.

4.2 HYDROSTRATIGRAPHIC SURFACES

The hydrostratigraphic surfaces were produced using the following two-step procedure:

- Surface Trend Step:
 - Perform 2-D kriging of all hydrostratigraphic data on a uniform grid.
- Constrain Step:
 - Remove surface trend grid points within 2000 ft of Phase I hydrostratigraphic "picks."
 - Use linear triangular functions to interpolate the Phase I hydrostratigraphic "picks" and the remaining surface trend grid points.

The top of the Crouch Branch Confining Unit surface trend is shown in Figure 4.2. The shaded circles represent digitized contours from Aadland et al. (1995, Plate 16). The contour data south of Pen Branch fault was offset -40 ft so that a continuous surface will result from the surface trend step. The constrain step was not performed since Phase I hydrostratigraphic data is absent. The

final top of the Crouch Branch Confining Unit is obtained by offsetting the continuous surface by +40 ft south of Pen Branch fault to restore the fault.

The top of the Gordon Aquifer surface trend is shown in Figure 4.3. The shaded circles represent digitized contours (selected points on the contours) from Aadland et al. (1995, Plate 14). The shaded circle P's represent Phase I hydrostratigraphic data. The contour data south of Pen Branch fault was offset -40 ft so that a continuous surface will result from the surface trend step. Figure 4.4 shows the top of Gordon Aquifer after the constrain step. The final top of Gordon Aquifer is obtained by offsetting the continuous surface by +40 ft south of Pen Branch fault to restore the fault.

The top of Gordon Confining Unit surface trend is shown in Figure 4.5. The shaded circles represent digitized contours from Aadland et al. (1995, Plate 12). The shaded circle P's represent Phase I hydrostratigraphic data. The contour data south of Pen Branch fault was offset -40 ft so that a continuous surface will result from the surface trend step. Figure 4.6 shows the top of Gordon Confining Unit after the constrain step. The final top of Gordon Confining Unit is obtained by offsetting the continuous surface by +40 ft south of Pen Branch fault to restore the fault.

Figure 4.7 shows the top of "lower" aquifer zone after the two-step procedure with the shaded circles representing Phase I hydrostratigraphic data. The final top of "lower" aquifer zone is obtained by offsetting the continuous surface by +20 ft south of Pen Branch fault to restore the fault.

Figure 4.8 shows the top of "tan clay" confining zone after the two-step procedure with the shaded circles representing Phase I hydrostratigraphic data. The final top of "tan clay" confining zone is obtained by offsetting the continuous surface by +20 ft south of Pen Branch fault to restore the fault.

The top of transmissive zone surface trend is shown in Figure 4.9. The shaded circles represent Phase I hydrostratigraphic data and the digitized Phase I contours (WSRC, 1997b, Figure 3-7). Figure 4.10 shows the top of transmissive zone after the two-step procedure with the shaded circles representing Phase I hydrostratigraphic data.

Phase I hydrostratigraphic data and digitized Phase I contours (WSRC, 1997b, Figure 3-5) are used to construct the top of "AA" horizon surface trend. Figure 4.11 shows the top of "AA" horizon after the two-step procedure with the shaded circles representing Phase I hydrostratigraphic data.

Phase I hydrostratigraphic data and digitized Phase I contours (WSRC, 1997b, Figure 3-4) are used to construct the top of 'A' horizon surface trend. Figure 4.12 shows the top of "A" horizon after the two-step procedure with the shaded circles representing Phase I hydrostratigraphic data.

5.0 GROUNDWATER FLOW MODEL DEVELOPMENT

Development of the R-Reactor area groundwater flow model followed the development of the General Separation Area groundwater flow model (WSRC, 1997a).

5.1 MODEL DISCRETIZATION

Groundwater recharge over the R-Reactor Area travels as deep as the sandy transmissive zone before discharging to Mill Creek, Pond A, Pond C, Pond 5 or tributary. The vertical boundaries are generally defined along natural no-flow boundary conditions along streams, ponds and canals. Exception is the southern boundary where prescribed head is applied between Pond 2 and Pond 5 and between Pond 5 and Pond C. The western no-flow boundary is defined using the regional water table map obtained from Hiergesell (1997). Figure 5.1 shows the estimated water table and the model boundary.

The model discretization is approximately aligned with the Pen Branch fault and the areal resolution is 200 ft by 200 ft surrounding the R-Reactor Seepage Basins. There are 64 elements along the east-west axis and 61 elements along the north-south axis. The top of the three-dimensional mesh conforms to the ground surface and the bottom of the mesh conforms to the top of the Crouch Branch Confining Unit. Interior nodal layers conform to the top of the Gordon Aquifer, top of the Gordon Confining Unit, top of the "lower" aquifer zone, top of the "tan clay" confining zone, top of the transmissive zone, top of the "AA" horizon, and top of the "A" horizon. The transmissive zone, "AA" horizon, "A" horizon, and surface soils are each represented by three finite-elements in the vertical direction. The Gordon Aquifer, Gordon Confining Unit, "lower" aquifer zone, and "tan clay" confining zone are each represented by two finite-elements in the vertical direction. The mesh size is $64 \times 61 \times 20 = 78080$ elements or $65 \times 62 \times 21 = 84630$ nodes. Both areally and vertically, the mesh is finer near the R-Reactor Seepage Basins. Figure 5.2 shows an areal view of the active elements and the shaded area highlights the two elemental rows representing the Pen Branch fault. The Pen Branch fault is modeled as a linear shift over a two element wide fault interval. Figure 5.3 shows a cross-section of the mesh at the 25th north-south nodal plane.

5.2 BOUNDARY CONDITIONS

The top boundary conditions are illustrated in Figure 5.4. The ponds and canals are modeled with a general source head boundary condition with leakance coefficient of 1.0 d^{-1} and source head set to the current water level. The remaining area is assigned a combination recharge/drain boundary condition or no-flow boundary condition. The no-flow boundary condition represents buildings 105-R and 186-R. The remaining area is assigned a combination recharge/drain boundary condition with a maximum recharge rate of 18 in/yr and drain coefficient of 1.0 d^{-1} , which is the same as the recharge/drain boundary condition used in the General Separation Area flow model (WSRC, 1997a).

The bottom of the model is assigned a general source head boundary condition with leakance coefficient of $3 \times 10^{-6} \text{ d}^{-1}$ and source head from the Crouch Branch Aquifer. Two-dimensional kriging of digitized head contours from Aadland et al.(1995, Plate 45) produces the estimated Crouch Branch Aquifer head shown in Figure 5.5. The shaded circles represent the digitized head contours.

The vertical boundaries are assigned either a no-flow or prescribed head boundary condition. The eastern, northern, and western boundary nodes are assigned prescribed head for the Gordon Aquifer and "lower" aquifer zone with no-flow elsewhere. The majority of the southern boundary nodes are assigned prescribed head for the Gordon Aquifer, "lower" aquifer zone, and "upper" aquifer zone (which includes transmissive zone, "AA" horizon, "A" horizon, and surface soil) with no-flow elsewhere. Figure 5.6 shows the vertical boundary conditions.

In order to estimate the Gordon Aquifer prescribed heads, two-dimensional kriging of digitized head contours from Aadland et al. (1995, Plate 42) and average hydraulic head at two monitoring wells (P-20B and RCP-1A) is performed. Figure 5.7 shows the estimated Gordon Aquifer head. The shaded circles represent the digitized head contours and the two monitoring wells.

Due to the lack of data in the "lower" aquifer zone, the estimated water table is translated and smoothed to form an estimate of the "lower" aquifer zone head. Figure 5.8 shows the estimated "lower" aquifer zone head and the shaded circle represents the monitoring well P-20C. A linear translation function is defined using the following information:

- Ground surface elevation at P-20C = 290 ft
- Estimated water table elevation at P-20C = 269 ft
- "lower" aquifer zone average head at P-20C = 238 ft

The translation function has the following form:

$$H_{laz} = H_{WT} - T(z), \text{ at a given (Easting, Northing),}$$

where H_{laz} is the "lower" aquifer zone head, H_{WT} is the estimated water table, T is the translation in feet, and $T(z)$ is a linear function of ground elevation z . From the information at P=20C, the linear function T satisfies

$$T(290) = 31 \text{ ft, since } 238 = 269 - 31 \text{ (} H_{laz} = H_{WT} - T(z) \text{)}$$

In order to account for a small upward hydraulic gradient across the "tan clay" confining zone in low lying drainage areas, the linear function T satisfies

$$T(190) = -1 \text{ ft}$$

The final estimated "lower" aquifer zone head results from a smoothing of H_{laz} . A common weighting scheme for producing a smooth estimate is given by Davis (1986):

$$\hat{h}_{ij} = \frac{1}{16} (h_{i-1,j-1} + h_{i-1,j+1} + h_{i+1,j-1} + h_{i+1,j+1}) + \frac{1}{8} (h_{i-1,j} + h_{i+1,j} + h_{i,j-1} + h_{i,j+1}) + \frac{1}{4} h_{ij}$$

where $h_{i,j}$ is the pre-smoother heads and $\hat{h}_{i,j}$ is the smoothed heads. The smoothing iteration defined above is performed eight times starting with H_{laz} and produces the estimated "lower" aquifer zone head used for the prescribed head boundary conditions.

In order to assign the prescribed head boundary conditions for the "upper" aquifer zone, two-dimensional kriging of the digitized regional water table map onto a uniform grid is performed. Figure 5.1 shows the estimated water table elevation.

5.3 CONDUCTIVITY FIELD

The mini-permeability, laboratory permeability, mud fraction, and CPT data presented in Section 3 are correlated to horizontal conductivity (K_h) and vertical conductivity (K_v). The resulting conductivity data at borehole or CPT locations presented in Appendix F are segregated by elemental layer and averaged vertically to form scattered 2D conductivity data. Arithmetic averaging is used for horizontal conductivity. Arithmetic, harmonic, or geometric averaging is used for vertical conductivity depending on the vertical resolution and model calibration considerations. With all conductivity data having been segregated by element layer, the scattered data for each layer are fit using a bicubic spline algorithm (WSRC, 1997a, page 17) with a 500 ft grid resolution. Element conductivity values are computed by evaluating the two-dimensional fit at the element centroid locations. The two-dimensional elemental conductivity fields are stacked to form the three-dimensional K_h and K_v fields. Figure 5.9 illustrates the conductivity field construction process. Notice that mud fraction data overwrites CPT data and the permeability data overwrites mud fraction and CPT data. Buildings 105-R and 186-R are modeled as low conductivity ($K_h = K_v = 10^{-8}$ ft/d) down to an elevation of 270 ft and 278 ft, respectively.

The above process is used to construct the initial conductivity field. The calibrated conductivity field results from scaling and restricting the initial conductivity field. Figures 5.10 through 5.17 show the following subset of the two-dimensional elemental calibrated conductivity fields: K_h distribution for Gordon Aquifer, K_v distribution for Gordon Confining Unit, K_h distribution for "lower" aquifer zone, K_v distribution for "tan clay" confining zone, K_h distribution for the transmissive zone, K_v distribution for "AA" horizon, K_v distribution for "A" horizon, and K_v distribution for surface soil. Figure 5.15 through 5.17 show high K_v near low lying areas, since the anisotropy ratio is restricted for the elements within 10 ft of the surface. The maximum anisotropy ratio depends on the element thickness and is shown below.

Element Thickness Range (ft)	Maximum Anisotropy Ratio
[0, 0.5)	1
[0.5, 1.5)	3
[1.5, 2.5)	10
[2.5, 3.5)	30
[3.5, 4.5)	100

Figures 5.18 and 5.19 show a cross-section of the K_h and K_v conductivity fields, respectively, at the 25th north-south nodal plane.

5.3.1 Mini-Permeability and Laboratory Permeability

The mini-permeability data are used as horizontal conductivity data with K_h being defined by an anisotropy ratio depending on the hydrostratigraphic unit. Laboratory permeability data are specified as K_h or K_v . For soil samples that do not have both K_h and K_v estimates, an anisotropy ratio is used to produce the pair of conductivity estimates. The mini-permeability and laboratory permeability anisotropy ratios were initially set equal to 3.6 following WSRC (1997a, page 16).

5.3.2 Mud Fraction Correlation

For each hydrostratigraphic unit, a correlation is defined between mud fraction and K_h with K_v being defined by an anisotropy ratio. The mud fraction to K_h correlation is a combination of the correlation presented by Celeste (1997) and the correlation presented by WSRC (1997c, Figure 5-2) which was prepared by Parsons Engineering Science, Inc. Both correlations relate laboratory permeability measurements and mud fraction. The Celeste correlation fits mostly high conductivity data, while the Parsons correlation fits more low conductivity data. The Celeste correlation is

$$\log(K_h(\text{ft/d})) = 1.86 - (4.01 * \text{mud fraction}),$$

with K_h varying from 0.0071 ft/d to 72.4 ft/d.

The Parsons correlation is approximated by a piecewise linear function interpolating the following points:

Mud Fraction	Parson Fit ($\log(K_h(\text{ft/d}))$)
0.13	-1.55
0.25	-2.55
0.46	-3.55
0.82	-4.55

The Parsons K_h varies from 2.8×10^{-5} ft/d to 0.028 ft/d. The mud fraction to conductivity anisotropy ratios were initially set equal to 3.6 following WSRC (1997a, page 16).

5.3.3 CPT Correlation

The CPT to K_h correlation is a combination of two CPT regressions developed by Celeste (1997). The CPT regression for sandy sediments (CPTSS) is given by:

$$\begin{aligned} \log(K_h(\text{ft/d})) = & 0.4902 + (0.0454 * \text{friction ratio}) \\ & + (0.0896 * \text{pore pressure}) - (0.0849 * \text{sleeve stress}) \\ & + (0.00538 * \text{tip resistance}) \end{aligned}$$

The CPT regression for muddy sediments (CPTMS) is given by:

$$\log(K_h(\text{ft/d})) = -3.59 - (0.104 * \text{sleeve stress}) + (0.0212 * \text{tip resistance})$$

Celeste (1997) suggested using CPTSS regression when the friction ratio is less than 5.5 and ARA's pore pressure is less than 20. Otherwise, use the CPTMS regression. The pore pressure clause for ARA's data is for the Gordon Aquifer Confining Unit which has high pore pressure, but low friction ratios. The CPTSS K_h varies from 0.4 ft/d to 100 ft/d and the CPTMS K_h varies from 3.3×10^{-5} ft/d to 0.09 ft/d. In order to smooth the transition between the two regressions, a friction ratio transition interval [ratlower, ratupper] is defined. Initially, [ratlower, ratupper] = [3.0, 5.5]. ARA CPT data with pore pressure greater than 20, use the CPTMS regression. The remaining CPT data use the following:

$$\log(K_h) = \begin{cases} \text{CPTSS if friction ratio} < \text{ratlower} \\ \text{CPTSS} + (\text{CPTMS} - \text{CPTSS}) \frac{(\text{friction ratio} - \text{ratlower})}{(\text{ratupper} - \text{ratlower})} & \text{if } \text{ratlower} \leq \text{friction ratio} \leq \text{ratupper} \\ \text{CPTMS if friction ratio} > \text{ratupper} \end{cases}$$

6.0 GROUNDWATER FLOW MODEL RESULTS

The FACT code (WSRC, 1995) was used with the finite-element option and Newton-Raphson method with one backtrack. The "pseudo-soil" relative permeability and water retention curves were used to model flow in the unsaturated zone. For most calibration runs, the FACT code needed 8 iterations to converge with a restart file and 20 minutes of CPU on a SGI R8000.

6.1 MODEL CALIBRATION

The monitoring well average head data were used as targets for calibrating the R-Reactor Area model. Initial calibration runs had perched water in the "A" horizon and surface soil and large negative head residuals (simulated-data) in the "AA" horizon. This was improved by increasing K_v in the "A" horizon and decreasing K_v in the "tan clay" confining zone. Since the conductivity field was constructed from several different types of data, the initial conductivity field had large spatial variability which caused the simulated heads to have more variability than the monitoring well data. Several calibration runs were performed to smooth the conductivity field. A detailed listing of all calibration runs is presented in Appendix G. Since hydrostratigraphic unit boundaries exhibit large variation in elevation north of RRSB, water table elevations for all calibration runs were not as smooth as the estimated water table in Figure 5.1. The hydrostratigraphic "picks" should be reexamined by WSRC. Listed below is a summary of the last calibration run (Run 9C).

1. Geometric and arithmetic averaging were used to vertically average the K_v data in "A" horizon. Harmonic averaging was used elsewhere.
2. Correlations between mud fraction and K_h are given in Table 6.1.
3. Friction ratio transition intervals for the CPT correlations are given in Table 6.2. In order to be consistent with the Fugro CPT data, ARA friction ratios were increased by one unit.
4. Mini-permeability anisotropy ratios are given in Table 6.3.
5. RCP-1A mud fraction data is consistently lower than surrounding boreholes in surface soil, "A" horizon, and "AA" horizon. RCP-1A mud fraction data above the transmissive zone was not used.
6. Three calibration zones were defined north of RRSBs which were designed to raise the water table in the area. Figure 6.1 shows the calibration zones and Table 6.4 presents the restrictions on the conductivity for the three calibration zones.
7. The final modifications to the initial conductivity field are specified in Table 6.5.

Table 6.6 presents the calibrated model average conductivities for each hydrostratigraphic unit. After the final calibration run (Run 9C) was made, a Pen Branch fault sensitivity run (Run 9D) was performed. South of Pen Branch fault was lowered to match north of Pen Branch fault, which resulted in lower hydraulic head at the monitoring wells in all hydrostratigraphic units (see Appendix G). The lower heads are due to higher transmissibility in the 'lower' aquifer zone and transmissive zone south of R-Reactor Area.

6.2 HEAD RESIDUALS

Simulated head and residual at the 55 monitoring wells is presented in Appendix A for Run 9C. The overall root-mean-squared (RMS) is 3.7 ft and Table 6.7 shows the average residual (simulated-data) and RMS for each unit. Figures 6.2 through 6.5 show areal views of the head residuals by hydrostratigraphic unit. Figure 6.3 shows three large negative residuals (simulated head is low) in the "AA" horizon surrounding RRSBs and one large positive residual north of RRSB. Figure 6.4 shows the "A" horizon head residuals. Several positive residuals are located north of RRSBs. The RRSBs contain one large negative residual. Several large negative residual are located inside the R-Reactor Area fence. All residuals south of the R-Reactor Area fence are positive. The three monitoring wells constructed in 1997 (one time measurements) are located east of the R-Reactor Area and all three have a large positive residual. Figure 6.5 presents the surface soil head residuals. All residuals are negative. Monitoring well RSC-8 has a head residual of -9.6 ft.

6.3 GROUNDWATER RECHARGE/DISCHARGE

The average recharge rate over the total model area is 16.2 in/yr and the local recharge rate away from discharge areas is 18 in/yr. Figure 6.6 illustrates the rate of groundwater recharge/discharge for the R-Reactor Area model. Table 6.8 compares stream baseflow estimates from Hiergesell (1997) to simulated values and Figure 6.7 presents the discharge zones listed in Table 6.8. Considering the uncertainty of baseflow estimates, the agreement between measured and simulated baseflow is acceptable.

6.4 GROUNDWATER FLOW PATTERNS

Figures 6.8 through 6.10 illustrate simulated head of the Gordon Aquifer (nodal layer 2), "lower" aquifer zone (nodal layer 6), and transmissive zone (nodal layer 11), respectively. Figure 6.11 presents the simulated water table. Notice that the drainage areas and the R-effluent canal have affected the water table. The water table is highest at the RRSBs because of the low K_v in "A" horizon (Figure 5.17) and surface soil (Figure 5.18). The northern edge of the water table mound at the RRSBs follows the contours of the hydrostratigraphic units (Figures 4.10, 4.11, and 4.12). Figure 6.12 shows a cross-section of the simulated head at the 25th north-south nodal plane. Figure 6.13 presents a cross-section of the simulated water saturation at the 25th north-south nodal plane, which crosses through the R-Reactor Area and RRSBs.

Further investigation of the groundwater flow requires three-dimensional pathline analysis. The flow field is seeded within 10 ft of the ground surface at eight locations listed in Table 6.9. Figure 6.14 presents an areal views of the eight three-dimensional pathlines. Figures 6.15 and 6.16 present side views of the pathlines facing north and west, respectively. Particle tracing used an effective porosity of 25% (WSRC, 1997a, page 7).

Since there is a water divide northwest of the RRSBs, all seeds move eastward toward Pond C. Seed 1 traveled down to the transmissive zone before discharging to the surface. Seed 2 traveled down to the "lower" aquifer zone before leaving the side of the model. Seeds 3, 4, 5, and 7 traveled down to the transmissive zone before discharging to the surface. Seeds 6 and 8 traveled down to the Gordon Aquifer before leaving the bottom of the model.

The pathlines for Seeds 4, 5, 6, and 7 are subject to uncertainty due to the uncertainty of the location of the water divide north of RRSB. Changes in recharge, conductivity distribution or contours of the hydrostratigraphic units may move or turn the water divide causing the pathlines to move northward toward Mill Creek.

7.0 CONCLUSIONS

- A detailed groundwater flow model has been developed for the R-Reactor Area which simulates average flow conditions. The model incorporates Phase I hydrostratigraphic data, borehole data, CPT data, and laboratory permeability data. The simulated groundwater flow field is consistent with the observed water levels in wells and groundwater recharge and discharge estimates. Simulated hydraulic heads have an acceptable RMS deviation of 3.7 feet. This groundwater model provides a sound basis for subsequent detailed contaminant transport simulations.
- The groundwater flow model should be further refined using Phase II characterization and monitoring data, before contaminant transport simulations are performed. The Phase II characterization data will assist in resolving uncertainties by providing:
 1. Head data in the "undefined high permeability zone" directly above the Tan Clay confining zone.
 2. Additional CPT data will add to the lithologic and hydrostratigraphic "pick" data.
 3. Additional information on the perched water table directly beneath the RRSBs. The Phase II characterization data should resolve the extent and thickness of the perched water table and its effects on the subsequent transport simulations.

Additional data will assist in the refinement of particle tracking from the RRSBs to the final discharge areas.

- Transient flow simulations should be considered to refine the model in the next phase. The installation of the asphalt liner has resulted in a decrease in hydraulic heads in monitoring wells in and about the RRSB and provides an opportunity for transient calibration.

8.0 REFERENCES

- Aadland, R.K., Gellici, J.A. and Thayer, P.A., 1995. Hydrogeologic framework of west-central south Carolina. South Carolina Department of Natural Resources, Water Resources Division Report 5.
- Aadland, R. K., M. K. Harris, C. M. Lewis, T. F. Gaughan, and T. M. Westbrook, 1991, Hydrostratigraphy of the General Separations Area, Savannah River Site (SRS), South Carolina, USDOE Report WSRC-RP-91-13, Westinghouse Savannah River Company, Aiken, SC 29808, 114p.
- Colquhoun, D. J., I. D. Woollen, D. S. Van Nieuwenhuise, G. G. Padgett, R. W. Oldham, D. C. Boylan, J. W. Bishop, and P. D. Howell, 1983, Surface and Subsurface Stratigraphy, Structure and Aquifers of the South Carolina Coastal Plain, SCDHEC Report ISBN 0-9613154-0-7, 78p.
- Davis, J.C., 1986. *Statistics and Data Analysis in Geology*, 2nd Edition, John Wiley & Sons, New York.
- Dennehy, K. F., D. C. Prowell, and P. B. McMahon, 1989, Reconnaissance Hydrogeologic Investigation of the Defense Waste Processing Facility and Vicinity, Savannah River Plant, South Carolina, U. S. Geological Survey Water Resources Investigations Report 88-4221, 68p.
- Fallow, W.C. and Price, V., 1995. Stratigraphy of the Savannah River site and vicinity. *Southeastern Geology*, 35: 21-58.
- Fallow, W. C., V. Price, and P. Thayer, 1990, "Stratigraphy of the Savannah River Site, South Carolina", in Zullo, V. A., W. B. Harris, and V. Price, eds., 1990, Savannah River Region: Transition Between the Gulf and Atlantic Coastal Plains. Proceedings of the Second Bald Head Island Conference on Coastal Plains Geology, University of North Carolina at Wilmington, Wilmington, N.C.
- Hamming, R.W., 1973. *Numerical Methods for Scientists and Engineers*, Dover Publications, Inc., New York.
- Harris, M. K., R. K. Aadland, and T. M. Westbrook, 1990, "Lithological and Hydrological Characteristics of the Tertiary Hydrostratigraphic Systems of the General Separations Area, Savannah River Site, South Carolina," in Zullo, V. A., W. B. Harris, and V. Price, eds., 1990, Savannah River Region: Transition Between the Gulf and Atlantic Coastal Plains. Proceedings of the Second Bald Head Island Conference on Coastal Plains Geology, University of North Carolina at Wilmington, Wilmington, N.C., pp. 68-73.
- Hiergesell, R.A., 1997. Personal Communication, June 17.
- Logan, W.R. and Euler, G.M., 1989. Geology and groundwater resources of Allendale, Bamberg, and Barnwell counties and part of Aiken county, South Carolina. South Carolina Water Resources Commission Report, 155, 113 pp.

Pekkala, R.O., Jewell, C.E., Price, V., and Bledsoe, H.W., 1987. Environmental Information Document: L-Area Oil and Chemical Basin, DPST-85-700, E.I. du Pont de Nemours and Company, Savannah River Plant, Aiken, SC.

WSRC, 1995. FACT: Subsurface Flow and Contaminant Transport Documentation and User's Guide (U), WSRC-TR-95-0223, Westinghouse Savannah River Company Aiken, SC.

WSRC, 1997a. Integrated Hydrogeological Model of the General Separation Area (U), Volume 2: Groundwater Flow Model, WSRC-TR-96-0399, Westinghouse Savannah River Company, Aiken, SC.

WSRC, 1997b. Preliminary Characterization Report Phase I RFI/RI for the R-Reactor Seepage Basins/108-4R Overflow Basin (U), WSRC-RP-97-196, Westinghouse Savannah River Company, Aiken, SC.

WSRC, 1997c. Evaluation of Cone penetrometer Data for permeability Correlation at Savannah River Site, WSRC-RP-97-63, Westinghouse Savannah River Company, Aiken, SC.

Figure 1.1 R-Reactor Area

CHRONOSTRATIGRAPHIC UNITS		LITHOSTRATIGRAPHIC UNITS (Fallaw and Price, 1995)		HYDROSTRATIGRAPHIC UNITS (Aadland et al., 1995)	
System	Series	Group	Formation		
Eocene	Upper	Barnwell Group	"upland" unit
			Tobacco Road Sand		
			Dry Branch Formation		
		Middle	Orangeburg Group	Clinchfield Formation
Santee Formation					
Warley Hill Formation					
Paleocene	Lower		Congaree Formation
			Fournile Branch Formation		
			Snapp Formation		
		Upper	Black Mingo Group	Lang Syne Formation
Sawdust Landing Formation					
Steel Creek Formation					
Cretaceous	Upper		Black Creek Group
			Group		
			Middendorf Formation		
Triassic		Newark Supergroup	Cape Fear Formation
			Sedimentary Rock (Dunbarton Basin)		
			Crystalline Basement Rock		
Precambrian					

Figure 2.1 Geologic and Hydrogeologic units for the Savannah River Site.

Figure 3.1 Name and Location of Borehole and CPT Data

Monitoring, Borehole and CPT locations

Figure 3.2 Monitoring Well, Borehole, and CPT Locations

3302 Maps From WSRC

Sheet 854 not shown

Figure 3.3 3302 Maps Obtained from WSRC

Figure 3.4 Topographic Surface

Figure 4.1 Model Area and Pen Branch Fault

Figure 4.2 Top of Crouch Branch Confining Unit Surface Trend (Prior to faulting)

Figure 4.3 Top of Gordon Aquifer Surface Trend (Prior to faulting)

Top of Gordon Aquifer(Prior to faulting) for Model

Figure 4.4 Top of Gordon Aquifer (Prior to faulting)

Figure 4.5 Top of Gordon Confining Unit Surface Trend (Prior to faulting)

Top of Gordon Confining Unit(Prior to faulting) for Model

Figure 4.6 Top of Gordon Confining Unit (Prior to faulting)

Figure 4.7 Top of "lower" Aquifer Zone (Prior to faulting)

Top of 'tan clay' confining zone(Prior to faulting) for Model

Figure 4.8 Top of "tan clay" Confining Zone (Prior to faulting)

Figure 4.9 Top of Transmissive Zone Surface Trend

Figure 4.10 Top of Transmissive Zone

Figure 4.11 Top of "AA" Horizon

Figure 4.12 Top of "A" Horizon

Estimated Water Table and Model Boundary

Figure 5.1 Estimated Water Table and Model Boundary

R-Reactor Area Active Mesh Elements

Figure 5.2 R-reactor Area Active mesh Elements

Cross-section of Stratigraphy-conforming mesh Slice at I=25

Figure 5.3 Mesh Cross-Section at I=25

Figure 5.4 Top Boundary Conditions

Figure 5.5 Estimated Crouch Branch Aquifer Head

R-Reactor Area Vertical Boundary Conditions

Figure 5.6 Vertical Boundary Conditions

Figure 5.7 Estimated Gordon Aquifer Head

Figure 5.8 Estimated "lower" Aquifer Zone Head

K-field Flowchart

Figure 5.9 K-Field Flow Chart

Figure 5.10 K_h Distribution for Gordon Aquifer, Element Layer 1

K_v Distribution for Gordon Confining Unit Element layer 4

Figure 5.11 K_v Distribution for Gordon Confining Unit, Element Layer 4

Figure 5.12 K_h Distribution for "lower" Aquifer Zone, Element Layer 6

K_v Distribution for 'tan clay' confining zone
Element layer 7

Figure 5.13 K_v Distribution for "tan clay" Confining Zone, Element Layer 7

K_h Distribution for Transmissive zone
Element layer 10

Figure 5.14 K_h Distribution for Transmissive Zone, Element Layer 10

Figure 5.15 K_v Distribution for "AA" Horizon, Element Layer 13

Figure 5.16 K_v Distribution for "A" Horizon, Element Layer 16

K_v Distribution for Surface Soil
Element layer 19

Figure 5.17 K_v Distribution for Surface Soil, Element Layer 19

Figure 5.18 K_h Distribution at I=25

Figure 5.19 K_v Distribution at I=25

Figure 6.1 Calibration Zones

Head Residuals for Gordon Aquifer and 'lower' aquifer zone

Figure 6.2 Gordon Aquifer and "lower" Aquifer Zone Residuals

Head Residual for 'AA' horizon

Figure 6.3 "AA" Horizon Residuals

Head Residual for 'A' horizon

Figure 6.4 "A" Horizon Residuals

Head Residual for Surface Soil

Figure 6.5 Surface Soil Residuals

Figure 6.6 Simulated Groundwater Recharge (discharge)

Figure 6.7 Discharge Zones

Simulated Head in Gordon Aquifer

Figure 6.8 Simulated Head in Gordon Aquifer

Simulated Head in 'lower' aquifer zone

Figure 6.9 Simulated Head in "lower" Aquifer Zone

Simulated Head in Transmissive zone

Figure 6.10 Simulated Head in Transmissive Zone

Figure 6.11 Simulated Water Table

Simulated Head at I=25

Figure 6.12 Simulated Head at I=25

Simulated Saturation at I=25

Figure 6.13 Simulated Saturation at I=25

Figure 6.14 R-Reactor Area Pathlines with 50 Year Markers

Figure 6.15 Pathlines with 50 Year Markers (facing north)

Pathlines with 50 year markers (Facing West)

Figure 6.16 Pathlines with 50 Year Markers (facing west)

Table 4.1 Offsets South of Pen Branch Fault

Unit	Offset
Top of Crouch Branch Confining Unit	+40 ft
Gordon Confining Unit	+ 40 ft
"tan clay" Confining Zone	+20 ft

Table 6.1 Mud Fraction Correlations and Anisotropy Ratios

Hydrostatigraphic Unit	Mud Fraction Range Using Celeste Correlation and Parsons Correlation			Anisotropy Ratio
	Celeste	linear	Parsons	
Gordon Aquifer	[0,0.4]	[0.4,0.46]	[0.46,1]	3.6
Gordon Aquifer CU	[0,0.4]	[0.4,0.46]	[0.46,1]	3.6
"lower" aquifer zone	[0,0.4]	[0.4,0.46]	[0.46,1]	3.6
"Tan clay" confining unit	[0,0.15]	[0.15,0.24]	[0.24,1]	3.6
Transmissive Zone	[0,0.15]	[0.15,0.24]	[0.24,1]	3.6
"AA" horizon	[0,1]			3.6
"A" horizon	[0,1]			3.6
Surface Soil	[0,1]			3.6

Table 6.2 Friction Ratio Transition Intervals and Anisotropy Ratios

Unit	Transition Interval	Anisotropy Ratio
Gordon Aquifer	[3,5.5]	3.6
Gordon Aquifer CU	[3,5.5]	3.6
"lower" aquifer zone	[3,5.5]	3.6
"Tan clay" confining unit	[2,3]	3.6
Transmissive Zone	[2,3]	3.6
"AA" horizon	[3,5.5]	3.6
"A" horizon	[5.5,7]	3.6
Surface Soil	[5.5,7]	3.6

Table 6.3 Mini-Permeability Anisotropy Ratios

Unit	Anisotropy Ratio
Gordon Aquifer	3.6
Gordon Aquifer CU	3.6
"lower" aquifer zone	3.6
"Tan clay" confining unit	200
Transmissive Zone	200
"AA" horizon	100
"A" horizon	100
Surface Soil	3.6

Table 6.4 Calibration Zones

Zone #	Hydrostratigraphic Units	Min Kh (ft/d)	Max Kh (ft/d)	Min Kv (ft/d)	Max Kv (ft/d)
1	"A" and "AA" horizons, surface soils	1	3	0.01	0.02
2	"A" and "AA" horizons, surface soils	1	3	0.1	0.2
3	transmissive zone	0.1	0.5	0.001	0.005

Table 6.5 Summary of Modifications to Initial Conductivity Field

HydroStratigraphic Zone	K _h Multiplier (if different from 1)	K _h lower bound (ft/d)	K _h upper bound (ft/d)	K _v Multiplier (if different from 1)	K _v lower bound (ft/d)	K _v upper bound (ft/d)
Gordon Aquifer	--	--	--	--	0.1	--
Gordon Confining Unit	--	--	0.02	--	--	0.0001
"lower" aquifer zone	--	--	20.0	--	--	0.4
"tan clay" confining zone	--	--	1.0	0.5	--	--
Transmissive Zone	--	--	--	--	0.1	--
'AA' horizon	2.0	--	--	2.0	--	--
'A' horizon	1.25	--	--	1.25	--	--
Surface Soils	0.25	--	--	0.25	--	--

Table 6.6 Calibrated Model Average Conductivities

HydroStratigraphic Zone	Average K_h in Model (ft/d)	Average K_v in Model (ft/d)
Gordon Aquifer	30.5	0.44
Gordon Confining Unit	0.018	0.00018
"lower" aquifer zone	18.0	0.22
"tan clay" confining zone	0.98	0.015
Transmissive Zone	20.7	0.3
"AA" horizon	12.7	0.18
"A" horizon	1.9	0.13
Surface soils	0.73	0.043

Table 6.7 Average residual and RMS

Unit	Number of Wells	Average Residual	RMS
Gordon Aquifer	2	1.7	1.7
"lower" aquifer zone	1	-0.1	0.1
"AA" horizon	6	-0.8	3.6
"A" horizon	36	1.3	3.8
Surface soil	10	-3.2	4.0

Table 6.8 Comparison of Measured and Simulated Stream Baseflow

Discharge Zones	Estimated Baseflow Contribution from R-Reactor Area (ft³/s)	Simulated Baseflow Contribution from R-Reactor Area (ft³/s)
North Mill Creek	--	2.3
South Mill Creek	0.3 - 0.4	0.25
East Mill Creek	--	0.33
Pond C Tributaries	--	2.4
Pond 5 Tributaries	--	0.33
Pond 2 Tributaries	--	0.18

Table 6.9 Seeds for 3-D Pathlines

Seed #	SRS Easting (ft)	SRS Northing (ft)	Elevation (ft)
1	77400	57000	290
2	74990	56620	288
3	75690	57100	287
4	75680	58120	298
5	75360	58590	294
6	74930	58460	298
7	74820	57870	302
8	74470	57120	289

Appendix A

Hydraulic Head Data and Residuals

Monitoring Well Data

Well ID	SRS Easting (ft)	SRS Northing (ft)	Bottom of screen (ft)	Top of screen (ft)	Average Head (ft)	Fact (ft) Run 9C	Residual (ft)
Gordon Aquifer							
P 20B	76816.7	56081.7	28.1	48.1	195.2	197.1	1.9
RCP 1A	74238.3	56968.1	46.8	56.8	194.2	195.7	1.5
Lower Aquifer Zone							
P 20C	76814.0	56067.7	138.0	148.0	238.5	238.4	-0.1
'AA' Horizon							
P 20D	76784.5	56075.2	225.4	244.4	269.2	267.5	-1.7
RSC 9	74565.3	59241.2	251.6	271.6	271.8	278.4	6.6
RSE 24	74638.9	57370.4	237.6	257.6	279.5	279.2	-0.3
RSF 1	74869.4	58505.3	228.8	238.8	277.4	274.6	-2.8
RSF 2	74628.6	57670.4	224.8	235.3	278.1	275.8	-2.3
RSF 3	75206.7	57621.4	229.8	239.8	279.4	274.9	-4.5
'A' Horizon							
RAC 1	74570.7	55107.3	247.3	277.3	273.7	276.6	2.9
RAC 2	74555.5	55026.3	243.4	273.4	272.5	275.9	3.4
RAC 3	74667.5	55015.3	242.3	272.3	272.2	275.5	3.3
RAC 4	74588.8	54984.0	238.2	268.2	271.5	275.3	3.8
RCP 1D	74223.5	56967.9	261.3	281.3	281.6	282.5	0.9
RDB 1D	74844.5	57097.3	265.5	285.5	285.8	282.5	-3.3
RDB 2D	74782.2	56879.8	265.7	285.7	285.0	280.1	-4.9
RDB 3D	74899.0	56881.9	265.8	285.8	282.8	279.3	-3.5
RRP 1	75634.6	54563.5	242.4	272.4	265.6	271.7	6.1
RRP 2	75829.8	54468.3	242.5	272.5	264.7	270.8	6.1
RRP 3	75853.0	54303.0	238.1	268.1	264.1	269.0	4.9
RRP 4	75723.3	54294.5	238.3	268.3	263.8	269.6	5.8
RSA 9	75616.2	58123.8	264.6	284.5	283.0	276.3	-6.7
RSA 10	75389.3	58172.8	268.8	288.7	280.8	280.5	-0.3
RSC 2	74378.6	58543.0	261.9	281.9	278.3	280.6	2.3
RSC 3	74699.7	58724.7	258.6	278.6	276.7	281.0	4.3
RSC 4	75097.8	58900.3	268.6	288.6	280.6	280.5	-0.1
RSC 5	75484.9	58901.2	258.3	278.3	274.2	276.9	2.7
RSC 10	75470.0	59542.7	255.5	275.5	271.9	274.2	2.3
RSD 1	75035.1	57440.8	267.9	287.7	286.4	285.2	-1.2
RSD 3	74702.3	57451.6	269.3	289.1	286.8	284.6	-2.2
RSD 7	75178.4	57394.3	267.3	287.3	285.2	285.4	0.2
RSD 8	75229.6	57394.0	267.3	287.3	285.4	285.3	-0.1
RSD 9	75185.9	57245.6	251.7	271.7	283.8	279.6	-4.2
RSE 3A	74931.2	57445.8	268.2	288.0	285.2	285.0	-0.2
RSE 4A	75101.1	57528.4	260.6	270.6	286.6	282.6	-4.0
RSE 7	74783.7	58481.5	266.5	286.3	280.6	281.5	0.9
RSE 8	74869.4	58538.8	271.2	291.0	284.0	282.8	-1.2
RSE 9	74971.1	58463.3	266.7	286.7	279.2	280.8	1.6
RSE 10	74848.3	58420.7	270.7	290.5	281.7	282.7	1.0
RSE 18	74839.5	58247.2	268.1	288.1	279.6	282.4	2.8
RSE 19	74791.2	58318.4	262.5	282.5	280.9	281.2	0.3
RSE 25	74544.5	55824.5	237.5	257.5	275.3	278.0	2.7
RBP 1D	77582.0	57217.0	243.0	253.0	254.5	260.6	6.1
RBP 2D	77510.0	56862.0	243.0	253.0	253.0	261.2	8.2
RBP 3D	77206.0	56828.0	248.0	258.0	258.0	264.5	6.5
Surface Soils							
RSB 7	75044.3	57692.8	272.7	292.6	285.9	284.9	-1.0
RSB 8	75178.2	57612.9	274.3	294.3	288.0	283.8	-4.2
RSC 8	75684.0	57818.1	271.3	299.3	293.6	284.0	-9.6
RSD 4	75154.6	57441.4	270.6	290.6	288.5	286.5	-2.0
RSD 5	75207.0	57439.9	269.6	289.6	287.2	285.7	-1.5
RSD 6	75256.6	57441.3	270.1	290.1	287.1	285.3	-1.8
RSE 1A	74712.7	57734.5	274.8	294.8	288.6	285.3	-3.3
RSE 1B	74698.1	57731.4	275.7	295.7	288.8	285.3	-3.5
RSE 1C	74684.1	57730.8	268.5	288.5	288.7	285.1	-3.6
RSE 2	74743.5	57594.9	269.7	289.5	286.7	284.7	-2.0

Appendix B

Borehole and CPT Data

Borehole Data

Well ID	SRS Easting	SRS Northing
N13	70856.20	66632.10
P20	76784.50	56075.20
RBW2CL	71795.10	58712.00
RBW2CU	71786.00	58715.30
RCH1	74294.90	59123.40
RCP1A	74238.30	56968.10
RPC1CL	74261.90	57923.30
RPC2CL	76120.70	58077.20

CPT Data

Well ID	SRS Easting	SRS Northing	Performed by
RBW1	74232.00	62042.50	Fugro
RBW2CL	71795.10	58712.00	Fugro
RCH1	74294.90	59123.40	Fugro
RPC1CL	74261.90	57923.30	Fugro
RPC2CL	76120.70	58077.20	Fugro
RPT1	75568.70	55946.90	ARA
RPT2	76333.40	56881.70	ARA
RPT3	75939.70	57479.80	Fugro
RPT5	76279.40	58755.70	Fugro
RPT6	75363.40	59311.20	Fugro
RPT7	75014.33	57848.28	ARA
RPT8	75404.33	58206.43	ARA
RPT9	75268.76	58625.32	ARA

Appendix C

Core Mud Fraction Plots

(2D) II Print II 16 Sep 1997 II /disk2/people/walt/Rreactor/Lithology/Coreplots/Plots/RPC1CL.ps.plt II

Appendix D Laboratory Data

Laboratory Permeability Data

Boring and Horizon ID	Geotechnical Samples (Shelby Tubes)		
	Sample Depth (ft, bls)	Horizontal Permeability (cm/sec)	Vertical Permeability (cm/sec)
RCH-1			
Horizon "A"	5 - 7	NA	9.90E-07
	10-12	3.30E-06	1.40E-06
	20-22	NA	4.70E-07
	25-27	NA	4.40E-06
Horizon "AA"	54-56	2.30E-04	1.60E-05
"Tan Clay" confining zone	125-127	NA	1.50E-06
RPC-1			
Horizon "A"	30-30.5	NA	1.10E-06
Transmissive zone	76-76.5	NA	7.80E-07
	76.5-77	NA	1.40E-06
"Tan Clay" confining zone	127-127.5	NA	4.00E-04
	127.5-128	NA	7.60E-05
	145-147	NA	6.50E-07
Gordon Confining Unit	211.5-213.5	NA	1.40E-07
RPC-2			
Surface Soils	8-9	NA	3.50E-06
	13-15	1.30E-08	2.90E-08
Horizon "A"	34-36	5.20E-06	8.00E-07
RPT-6			
Transmissive zone	71-71.5	NA	1.20E-06
	71.5-72	NA	5.40E-06
	80.5-81	NA	6.10E-04
"Tan Clay" confining zone	116-116.5	NA	2.20E-08
	116.5-117	NA	4.40E-08
	128-128.5	NA	1.50E-03
P-20			
Transmissive zone	105-107	3.40E-08	1.10E-07
Gordon Confining Unit	210-211	9.10E-07	1.10E-06

NA - not analyzed

RBW2CL Minipermeability Tests (E71795,N58712)

Elevation (ft)	Conductivity (ft/d)
164.8	7.9
163.6	10.5
158.8	14.6
157.8	12.0
149.7	38.5
148.6	43.9
143.1	34.1
139.8	48.4
139.1	37.9
137.5	27.2
137.1	51.2
135.1	24.6
134.1	0.4
132.3	1.9
131.6	0.7
129.7	1.7
127.8	1.8
127.1	1.6
125.1	2.3
124.1	4.4
122.8	3.3
122.1	6.5
121.1	10.9
120.1	6.2
118.9	1.2
118.1	1.4
117.1	2.0
115.8	1.3
114.9	4.1
114.1	2.1
113.1	1.3
111.8	3.5
111.1	2.2
110.1	0.8
109.1	0.4
104.5	10.1
103.8	11.4
102.8	0.2
100.1	4.8
99.1	10.8
97.8	12.7
96.7	10.2
95.1	6.9
93.9	1.9
93.1	3.6
89.9	3.1
82.8	65.3
79.1	53.4
78.1	47.6
77.1	53.2

RBW2CU Minipermeability Tests (E71786,N58715)

Elevation (ft)	Conductivity (ft/d)
204.9	7.7
204.2	15.2
203.2	11.2
199.8	13.6
199.2	14.7
197.8	20.5
196.9	26.0
196.2	40.3
194.8	26.0
194.2	30.6
190.2	39.8
185.0	11.0
184.2	27.9
183.2	33.2
180.0	36.7
176.8	8.9
175.2	13.8
173.8	11.5
173.2	43.3
167.4	7.1
166.8	24.7
166.2	48.0
164.8	11.6
164.2	5.6
162.7	10.5
162.2	26.6
161.2	33.2
158.5	26.9
157.9	23.0
157.2	16.2
156.2	29.7
155.2	52.7
149.8	34.4
142.9	32.2

RCH1 Minipermeability Tests (E74295,N59123)

Elevation (ft)	Conductivity (ft/d)
290.4	6.0
285.3	3.6
280.4	13.9
279.6	8.6
278.3	2.5
275.6	11.1
274.6	13.5
273.6	15.3
272.3	9.3
271.6	1.3
270.6	19.5
269.6	19.4
268.6	18.3
267.6	10.1
266.6	11.1
265.6	10.0
264.3	6.5
263.6	4.4
262.4	0.8
261.3	1.0
260.6	12.5
257.6	1.8
256.3	15.2
255.2	20.4
254.6	5.6
252.3	19.4
251.6	2.7
250.3	5.1
246.6	2.9
245.4	1.0
244.6	12.3
243.4	11.2
242.6	28.7
241.6	41.1
240.3	26.7
239.6	35.7
237.4	29.0
236.6	31.5
235.6	24.6
234.6	17.7
233.6	15.4
232.1	5.4
231.2	10.7
230.6	4.8
229.3	19.1
228.3	11.6
227.3	21.3
226.3	16.3
225.5	22.3
222.6	45.0

RCH1 Minipermeability Tests (E74295,N59123)

Elevation (ft)	Conductivity (ft/d)
221.6	27.0
220.6	26.2
219.6	27.0
217.6	30.9
216.6	30.7
215.6	46.5
214.6	90.0
213.6	91.5
211.6	121.5
207.6	111.3
206.6	100.2
205.6	49.0
201.4	31.8
200.6	28.0
199.6	62.2
198.6	62.4
197.6	51.8
196.6	43.5
195.6	64.0
194.6	64.7
192.6	77.0
191.6	28.2
190.6	92.3
189.6	77.6
188.6	67.3
187.6	102.0
186.6	27.8
185.6	75.9
184.6	87.9
183.6	83.1
182.4	75.7
181.6	74.6
180.6	57.0
179.6	34.5
175.0	27.2
174.4	55.5
173.0	36.2
172.6	92.1
171.3	64.5
170.6	99.6
169.6	112.1
168.6	73.8
167.6	92.2
166.6	113.3
164.6	84.6
162.6	63.0
161.6	107.1
160.6	94.3
159.6	135.3
157.6	48.2

RCH1 Minipermeability Tests (E74295,N59123)

Elevation (ft)	Conductivity (ft/d)
156.6	51.5
155.6	84.3
154.0	53.8
153.6	50.0
152.2	55.4
106.6	2.9

RPC1CL Minipermeability Tests (E74262,N57923)

Elevation (ft)	Conductivity (ft/d)
292.3	1.6
289.9	3.3
287.6	0.7
285.7	0.6
284.3	3.4
283.1	3.7
282.0	1.4
280.5	1.0
264.0	0.9
262.9	2.6
259.3	2.5
258.1	3.7
256.8	3.8
256.3	2.7
254.0	3.9
252.8	1.7
248.0	1.6
247.3	1.7
246.3	1.8
245.3	0.7
243.9	0.7
239.3	4.4
238.3	2.8
237.3	1.6
236.3	2.8
234.9	3.7
234.2	3.8
233.3	2.9
232.3	2.2
230.3	2.0
227.3	2.7
226.0	2.0
225.3	13.6
224.0	13.5
223.3	17.2
222.3	18.2
219.3	4.6
218.3	13.1
217.3	11.8
216.3	15.7
215.3	16.6
214.3	12.0
213.3	5.7
212.3	3.6
211.3	8.7
208.3	5.3
204.3	12.3
197.3	9.2
196.0	41.8
195.3	42.9

RPC1CL Minipermeability Tests (E74262,N57923)

Elevation (ft)	Conductivity (ft/d)
184.1	43.7
177.1	56.2
176.3	60.3
175.3	47.9
172.3	65.0
171.3	50.1
170.3	42.6
169.3	52.3
167.8	37.6
166.8	7.9
166.3	19.1
155.1	82.6
150.8	50.4
149.0	29.1
148.1	62.8
146.0	20.1
143.8	47.8
143.1	19.1
141.8	32.0
141.3	35.7
140.3	47.1
139.0	34.8
138.3	39.9

RPC2CL Minipermeability Tests (E76121,N58077)

Elevation (ft)	Conductivity (ft/d)
276.3	6.5
274.6	3.6
273.9	10.9
273.1	11.7
272.1	7.7
271.3	6.1
269.7	9.0
252.3	10.3
248.3	8.1
247.3	13.6
246.3	5.2
243.3	26.9
242.0	2.0
241.3	4.2
235.3	3.8
234.3	1.9
232.9	2.8
231.9	7.4
230.3	3.8
229.3	20.9
228.3	8.9
227.3	7.9
226.3	4.7
222.3	3.4
220.3	4.3
218.9	2.4
217.3	7.4
216.0	6.5
215.0	3.8
214.3	15.0
213.3	17.3
212.3	30.2
211.3	25.8
210.3	23.0
209.3	13.6
208.0	28.7
207.0	31.0
206.3	29.5
205.3	10.3
204.1	7.3
177.9	61.5
176.3	62.3
175.3	45.6
172.8	13.5
172.3	41.6
171.3	50.2
170.3	48.2
169.3	47.9
168.3	57.4
167.3	45.1

RPC2CL Minipermeability Tests (E76121,N58077)

Elevation (ft)	Conductivity (ft/d)
166.3	65.7
165.3	69.0
164.3	60.3
162.7	30.2
162.3	13.8
161.3	32.2
158.3	46.5
157.3	53.0
156.3	57.0
155.3	48.2
154.3	52.3
153.0	57.9
152.3	57.9
147.3	50.8
146.3	65.3
145.3	57.4
144.3	58.3
143.1	53.6
142.3	54.9
141.3	50.7
140.3	52.7
139.3	65.9
138.0	104.5
137.3	81.8
136.3	103.9
133.3	83.0
132.3	78.0
131.3	79.5
130.0	78.4
129.3	54.7
128.3	83.9
127.3	58.6
126.3	52.5
125.3	31.3
122.8	20.4
121.3	22.1
120.3	33.1
118.3	27.0
117.3	27.8
115.8	17.2
115.3	22.5
113.3	47.8
112.3	38.8
103.3	17.7
102.3	24.8

Appendix E

Hydrostratigraphic Data

R-Reactor Area Data

Well ID	SRS Northing (ft)	SRS Easting (ft)	Ground Surface (ft)	Top of 'A' Horizon above msl (ft)	Top of 'AA' Horizon above msl (ft)	Bottom of 'AA' Horizon above msl (ft)	Top of Tan Clay Confining Zone (ft)	Bottom of Tan Clay Confining Zone (ft)	Top of Gordon Confining Unit (ft)	Bottom of Gordon Confining Unit (ft)
RPC-01CL	57923.3	74261.9	304.3	284.3	256.3	231.3	179.3	154.3	95.3	ND
RPC-02CL	58077.2	76120.7	292.3	266.3	246.3	215.8	172.3	147.3	92.3	ND
RBW-2CL	58712.0	71795.1	325.1	325.1	295.1	225.1	190.1	169.1	90.12	ND
RCH-001	59123.4	74294.9	302.6	299.6	272.6	245.6	202.6	175.6	105.6	ND
N-13	66632.1	70856.2	335.9	328.9	318.9	262.9	235.9	223.9	115.9	103.9
P-20	56075.2	76784.5	287.7	277.7	257.7	215.2	171.7	152.0	81.7	73.7
RCP-1A	56968.1	74238.3	294.8	289.8	263.8	221.8	182.8	161.8	83.8	77.8
RBW1	62042.5	74232.0	284.0	284.0	268.5	234.0	221.0	214.0	ND	ND
RPT1	55946.9	75568.7	290.3	270.3	238.3	214.3	178.3	ND	ND	ND
RPT2	56881.7	76333.4	284.3	263.3	244.3	220.3	194.3	164.3	ND	ND
RPT3	57479.8	75939.7	298.3	275.3	228.3	203.3	175.3	155.3	ND	ND
RPT5	58755.7	76279.4	294.5	261.5	230.5	204.5	179.5	148.5	ND	ND
RPT6	59311.2	75363.4	297.9	293.9	263.9	240.9	190.9	167.9	ND	ND
RPT7	57848.3	75014.3	308.5	270.5	242.5	213.5	176.5	152.5	ND	ND
RPT8	58206.4	75404.3	307.9	280.9	242.9	217.9	177.9	155.9	98.9	ND
RPT9	58625.3	75268.8	301.7	269.7	237.7	211.7	173.7	155.7	102.7	ND

ND - No Data available

Appendix F
Conductivity Inferred from Core,
Laboratory Permeability, and CPT Data

Conductivity Data at N13

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
320.4	1.13E-01	3.13E-02	core
319.4	1.13E-01	3.13E-02	core
318.4	7.24E+00	2.01E+00	core
317.4	1.15E+01	3.19E+00	core
315.4	1.83E+01	5.07E+00	core
314.4	1.83E+01	5.07E+00	core
313.4	1.83E+01	5.07E+00	core
312.4	1.83E+01	5.07E+00	core
311.4	1.83E+01	5.07E+00	core
310.4	1.83E+01	5.07E+00	core
309.4	2.90E+01	8.05E+00	core
308.4	2.90E+01	8.05E+00	core
307.4	1.83E+01	5.07E+00	core
306.4	1.15E+01	3.19E+00	core
305.4	1.83E+01	5.07E+00	core
304.4	1.83E+01	5.07E+00	core
303.4	1.83E+01	5.07E+00	core
302.4	1.83E+01	5.07E+00	core
301.4	1.83E+01	5.07E+00	core
300.4	1.83E+01	5.07E+00	core
299.4	1.83E+01	5.07E+00	core
298.4	1.15E+01	3.19E+00	core
297.4	1.83E+01	5.07E+00	core
296.4	1.83E+01	5.07E+00	core
295.4	2.90E+01	8.05E+00	core
294.4	2.90E+01	8.05E+00	core
293.4	1.83E+01	5.07E+00	core
292.4	2.90E+01	8.05E+00	core
291.4	2.90E+01	8.05E+00	core
290.4	2.90E+01	8.05E+00	core
289.4	2.90E+01	8.05E+00	core
287.4	3.83E+01	1.06E+01	core
286.4	3.83E+01	1.06E+01	core
285.4	4.60E+01	1.28E+01	core
284.4	5.54E+01	1.54E+01	core
283.4	4.60E+01	1.28E+01	core
282.4	3.83E+01	1.06E+01	core
281.4	4.60E+01	1.28E+01	core
280.4	5.54E+01	1.54E+01	core
279.4	5.54E+01	1.54E+01	core
278.4	5.54E+01	1.54E+01	core
277.4	5.54E+01	1.54E+01	core
276.4	5.54E+01	1.54E+01	core
275.4	6.08E+01	1.69E+01	core
274.4	6.08E+01	1.69E+01	core
273.4	1.83E+01	5.07E+00	core
272.4	3.83E+01	1.06E+01	core
271.4	3.83E+01	1.06E+01	core

Conductivity Data at N13

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
270.4	4.60E+01	1.28E+01	core
269.4	2.90E+01	8.05E+00	core
268.4	2.90E+01	8.05E+00	core
267.4	4.60E+01	1.28E+01	core
266.4	3.83E+01	1.06E+01	core
265.4	5.54E+01	1.54E+01	core
264.4	4.56E+00	1.27E+00	core
263.4	4.56E+00	1.27E+00	core
262.4	2.54E-03	7.05E-04	core
261.4	1.82E+01	5.06E+00	core
260.4	1.82E+01	5.06E+00	core
259.4	1.39E-01	3.86E-02	core
258.4	1.39E-01	3.86E-02	core
257.4	1.82E+01	5.06E+00	core
256.4	1.82E+01	5.06E+00	core
255.4	1.50E-03	4.18E-04	core
254.4	2.89E+01	8.04E+00	core
253.4	1.82E+01	5.06E+00	core
252.4	3.82E+01	1.06E+01	core
251.4	3.82E+01	1.06E+01	core
250.4	3.82E+01	1.06E+01	core
249.4	1.82E+01	5.06E+00	core
248.4	1.82E+01	5.06E+00	core
247.4	2.89E+01	8.04E+00	core
246.4	2.89E+01	8.04E+00	core
245.4	1.82E+01	5.06E+00	core
244.4	1.50E-03	4.18E-04	core
243.4	8.91E-04	2.48E-04	core
242.4	1.82E+01	5.06E+00	core
241.4	4.60E+01	1.28E+01	core
240.4	1.50E-03	4.18E-04	core
239.4	2.54E-03	7.05E-04	core
238.4	1.82E+01	5.06E+00	core
237.4	2.89E+01	8.04E+00	core
236.4	5.54E+01	1.54E+01	core
235.4	6.07E+01	1.69E+01	core
234.4	8.91E-04	2.48E-04	core
233.4	1.82E+01	5.06E+00	core
232.4	2.89E+01	8.04E+00	core
231.4	1.50E-03	4.18E-04	core
230.4	8.36E-05	2.32E-05	core
229.4	3.20E-05	8.90E-06	core
228.4	1.15E-04	3.20E-05	core
227.4	3.20E-05	8.90E-06	core
226.4	2.43E-05	6.74E-06	core
225.4	1.50E-03	4.18E-04	core
224.4	2.54E-03	7.05E-04	core
223.4	1.82E+01	5.07E+00	core

Conductivity Data at N13

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
222.4	1.69E-04	4.69E-05	core
221.4	2.10E+01	5.82E+00	core
220.4	2.90E+01	8.05E+00	core
219.4	2.20E+01	6.10E+00	core
218.4	2.14E+01	5.93E+00	core
217.4	7.93E+00	2.20E+00	core
216.4	4.15E+00	1.15E+00	core
215.4	5.74E+00	1.59E+00	core
214.4	4.15E+00	1.15E+00	core
213.4	1.59E+01	4.41E+00	core
212.4	2.10E+01	5.82E+00	core
211.4	5.59E+01	1.55E+01	core
210.4	2.41E+01	6.69E+00	core
209.4	2.04E+01	5.66E+00	core
208.4	1.38E+01	3.84E+00	core
207.4	1.38E+01	3.84E+00	core
206.4	1.38E+01	3.84E+00	core
205.4	2.52E+01	7.01E+00	core
204.4	2.20E+01	6.10E+00	core
203.4	1.16E+01	3.22E+00	core
202.4	1.41E+01	3.91E+00	core
201.4	2.50E+01	6.94E+00	core
200.4	2.30E+01	6.39E+00	core
199.4	2.50E+01	6.94E+00	core
198.4	1.62E+01	4.49E+00	core
197.4	1.62E+01	4.49E+00	core
196.4	2.10E+01	5.82E+00	core
195.4	1.45E+01	4.02E+00	core
194.4	1.45E+01	4.02E+00	core
193.4	1.10E+01	3.05E+00	core
192.4	1.62E+01	4.49E+00	core
191.4	1.52E+01	4.21E+00	core
190.4	2.30E+01	6.39E+00	core
189.4	2.30E+01	6.39E+00	core
188.4	1.38E+01	3.84E+00	core
187.4	7.93E+00	2.20E+00	core
186.4	9.54E+00	2.65E+00	core
185.4	1.82E+01	5.07E+00	core
184.4	2.34E+01	6.51E+00	core
183.4	2.41E+01	6.69E+00	core
182.4	2.90E+01	8.05E+00	core
181.4	2.90E+01	8.05E+00	core
180.4	2.90E+01	8.05E+00	core
179.4	2.00E+01	5.56E+00	core
178.4	1.82E+01	5.07E+00	core
177.4	1.66E+01	4.62E+00	core
176.4	2.20E+01	6.10E+00	core
175.4	1.21E-03	3.37E-04	core

Conductivity Data at N13

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
174.4	1.74E+01	4.84E+00	core
173.4	3.18E+01	8.83E+00	core
172.4	1.62E+01	4.49E+00	core
171.4	2.41E+01	6.69E+00	core
170.4	3.18E+01	8.83E+00	core
169.4	3.18E+01	8.83E+00	core
167.4	3.09E+01	8.59E+00	core
166.4	3.09E+01	8.59E+00	core
165.4	3.24E+01	8.99E+00	core
164.4	3.18E+01	8.83E+00	core
163.4	1.26E+01	3.50E+00	core
162.4	1.02E+01	2.83E+00	core
161.4	3.09E+01	8.59E+00	core
160.4	2.00E+01	5.56E+00	core
159.4	3.09E+01	8.59E+00	core
158.4	3.09E+01	8.59E+00	core
157.4	3.04E+01	8.43E+00	core
156.4	3.04E+01	8.43E+00	core
155.4	3.04E+01	8.43E+00	core
154.4	2.10E+01	5.82E+00	core
153.4	2.10E+01	5.82E+00	core
152.4	2.90E+01	8.05E+00	core
151.4	3.09E+01	8.59E+00	core
150.4	3.18E+01	8.83E+00	core
149.4	1.52E+01	4.21E+00	core
148.4	1.59E+01	4.41E+00	core
147.4	2.90E+01	8.05E+00	core
146.4	2.10E+01	5.82E+00	core
145.4	3.18E+01	8.83E+00	core
144.4	1.42E+01	3.95E+00	core
143.4	1.32E+01	3.66E+00	core
142.4	2.52E+01	7.01E+00	core
141.4	3.49E+01	9.69E+00	core
140.4	3.93E+01	1.09E+01	core
139.4	3.83E+01	1.06E+01	core
138.4	3.93E+01	1.09E+01	core
137.4	3.18E+01	8.83E+00	core
136.4	5.44E+01	1.51E+01	core
132.4	2.20E+01	6.10E+00	core
131.4	2.30E+01	6.39E+00	core
130.4	1.82E+01	5.07E+00	core
127.4	5.44E+01	1.51E+01	core
126.4	6.08E+01	1.69E+01	core
125.4	6.67E+01	1.85E+01	core
124.4	6.67E+01	1.85E+01	core
122.4	4.60E+01	1.28E+01	core
121.4	5.54E+01	1.54E+01	core
120.4	4.60E+01	1.28E+01	core

Conductivity Data at N13

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
119.4	4.60E+01	1.28E+01	core
118.4	6.67E+01	1.85E+01	core
117.4	3.83E+01	1.06E+01	core
116.4	3.83E+01	1.06E+01	core
115.4	2.90E+01	8.05E+00	core
114.4	1.15E+01	3.19E+00	core
113.4	1.82E+01	5.07E+00	core
112.4	1.15E+01	3.19E+00	core
111.4	7.23E+00	2.01E+00	core
110.4	7.23E+00	2.01E+00	core
109.4	2.86E+00	7.96E-01	core
108.4	1.82E+01	5.07E+00	core
107.4	7.23E+00	2.01E+00	core
106.4	2.72E-05	7.56E-06	core
105.4	1.15E-04	3.20E-05	core
104.4	2.90E+01	8.05E+00	core
103.4	4.60E+01	1.28E+01	core
102.4	5.54E+01	1.54E+01	core
101.4	4.60E+01	1.28E+01	core
100.4	4.60E+01	1.28E+01	core
99.4	4.60E+01	1.28E+01	core
98.4	4.60E+01	1.28E+01	core
97.4	4.60E+01	1.28E+01	core
96.4	5.54E+01	1.54E+01	core
95.4	4.60E+01	1.28E+01	core
94.4	6.08E+01	1.69E+01	core
92.4	6.08E+01	1.69E+01	core
91.4	6.08E+01	1.69E+01	core
90.4	4.60E+01	1.28E+01	core
89.4	2.90E+01	8.05E+00	core
88.4	3.83E+01	1.06E+01	core
87.4	3.83E+01	1.06E+01	core
86.4	7.23E+00	2.01E+00	core
85.4	2.86E+00	7.96E-01	core
84.4	4.60E+01	1.28E+01	core
83.4	5.54E+01	1.54E+01	core
82.4	6.08E+01	1.69E+01	core
81.4	6.08E+01	1.69E+01	core
77.4	5.54E+01	1.54E+01	core
76.4	6.08E+01	1.69E+01	core
67.4	5.54E+01	1.54E+01	core
66.4	5.54E+01	1.54E+01	core
65.4	5.54E+01	1.54E+01	core
62.4	6.67E+01	1.85E+01	core
61.4	6.67E+01	1.85E+01	core
60.4	2.57E-05	7.14E-06	core
59.4	2.43E-05	6.74E-06	core
58.4	2.43E-05	6.74E-06	core

Conductivity Data at N13

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
57.4	2.86E+00	7.96E-01	core
56.4	2.90E+01	8.05E+00	core
55.4	3.83E+01	1.06E+01	core
54.4	3.83E+01	1.06E+01	core
52.4	2.90E+01	8.05E+00	core
51.4	5.54E+01	1.54E+01	core
50.4	5.54E+01	1.54E+01	core
49.4	5.54E+01	1.54E+01	core
48.4	5.54E+01	1.54E+01	core
43.4	4.60E+01	1.28E+01	core
40.4	4.60E+01	1.28E+01	core
39.4	4.60E+01	1.28E+01	core
37.4	6.08E+01	1.69E+01	core
36.4	6.08E+01	1.69E+01	core
35.4	6.67E+01	1.85E+01	core
34.4	4.60E+01	1.28E+01	core
33.4	5.54E+01	1.54E+01	core
32.4	5.54E+01	1.54E+01	core
31.4	5.54E+01	1.54E+01	core
30.4	5.54E+01	1.54E+01	core
29.4	4.41E-05	1.23E-05	core
27.4	3.20E-05	8.90E-06	core
23.4	8.36E-05	2.32E-05	core
17.4	6.08E+01	1.69E+01	core
16.4	6.67E+01	1.85E+01	core
15.4	6.67E+01	1.85E+01	core
14.4	6.67E+01	1.85E+01	core
12.4	6.67E+01	1.85E+01	core
11.4	6.67E+01	1.85E+01	core
10.4	6.67E+01	1.85E+01	core
9.4	6.67E+01	1.85E+01	core
8.4	6.67E+01	1.85E+01	core
7.4	4.41E-05	1.23E-05	core
-2.6	2.57E-05	7.14E-06	core
-3.6	4.55E+00	1.26E+00	core
-4.6	2.90E+01	8.05E+00	core
-5.6	2.57E-05	7.14E-06	core
-6.6	2.72E-05	7.56E-06	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
278.2	1.79E-01	4.97E-02	core
277.2	2.84E-01	7.89E-02	core
276.2	1.13E-01	3.13E-02	core
275.2	7.09E-02	1.97E-02	core
274.2	1.13E-01	3.13E-02	core
273.2	2.81E-02	7.81E-03	core
272.2	4.46E-02	1.24E-02	core
271.2	1.13E-01	3.13E-02	core
270.2	1.79E-01	4.97E-02	core
269.2	2.81E-02	7.81E-03	core
268.2	4.51E-01	1.25E-01	core
267.2	2.81E-02	7.81E-03	core
266.2	4.46E-02	1.24E-02	core
265.2	2.84E-01	7.89E-02	core
264.2	2.84E-01	7.89E-02	core
260.2	1.13E-01	3.13E-02	core
259.2	1.13E-01	3.13E-02	core
256.2	1.79E-01	4.97E-02	core
253.2	2.84E-01	7.89E-02	core
252.2	1.14E+00	3.16E-01	core
250.2	4.51E-01	1.25E-01	core
249.2	1.14E+00	3.16E-01	core
248.2	1.81E+00	5.02E-01	core
247.2	1.81E+00	5.02E-01	core
246.2	4.56E+00	1.27E+00	core
244.2	4.56E+00	1.27E+00	core
243.2	2.87E+00	7.97E-01	core
242.2	4.56E+00	1.27E+00	core
241.2	4.56E+00	1.27E+00	core
240.2	2.87E+00	7.97E-01	core
239.2	1.81E+00	5.02E-01	core
238.2	1.81E+00	5.02E-01	core
237.2	2.84E-01	7.89E-02	core
236.2	7.24E+00	2.01E+00	core
235.2	4.56E+00	1.27E+00	core
234.2	1.81E+00	5.02E-01	core
233.2	2.87E+00	7.97E-01	core
232.2	2.84E-01	7.89E-02	core
231.2	2.87E+00	7.97E-01	core
230.2	2.87E+00	7.97E-01	core
229.2	1.81E+00	5.02E-01	core
228.2	2.87E+00	7.97E-01	core
226.2	2.87E+00	7.97E-01	core
225.2	1.81E+00	5.02E-01	core
224.2	2.87E+00	7.97E-01	core
223.2	2.87E+00	7.97E-01	core
222.2	1.81E+00	5.02E-01	core
221.2	1.81E+00	5.02E-01	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
220.2	2.84E-01	7.89E-02	core
219.2	1.81E+00	5.02E-01	core
218.2	1.81E+00	5.02E-01	core
217.2	4.51E-01	1.25E-01	core
216.2	2.87E+00	7.97E-01	core
215.2	5.28E-04	1.47E-04	core
214.2	8.91E-04	2.48E-04	core
213.2	1.50E-03	4.18E-04	core
212.2	1.50E-03	4.18E-04	core
211.2	1.39E-01	3.86E-02	core
210.2	2.54E-03	7.05E-04	core
209.2	1.50E-03	4.18E-04	core
208.2	8.91E-04	2.48E-04	core
207.2	1.50E-03	4.18E-04	core
206.2	2.54E-03	7.05E-04	core
205.2	5.28E-04	1.47E-04	core
204.2	6.07E-05	1.69E-05	core
203.2	5.28E-04	1.47E-04	core
202.2	2.89E+01	8.04E+00	core
201.2	2.89E+01	8.04E+00	core
200.2	4.60E+01	1.28E+01	core
199.2	4.60E+01	1.28E+01	core
198.2	2.89E+01	8.04E+00	core
197.2	1.82E+01	5.06E+00	core
196.2	2.89E+01	8.04E+00	core
195.2	5.28E-04	1.47E-04	core
194.2	5.28E-04	1.47E-04	core
193.2	1.59E-04	4.40E-05	core
191.2	1.39E-01	3.86E-02	core
186.2	5.28E-04	1.47E-04	core
185.2	5.28E-04	1.47E-04	core
184.2	5.28E-04	1.47E-04	core
183.2	1.15E-04	3.20E-05	core
181.7	3.12E-04	9.64E-05	perm
180.2	3.13E-04	8.69E-05	core
179.2	1.15E-04	3.20E-05	core
178.2	1.15E-04	3.20E-05	core
177.2	3.20E-05	8.90E-06	core
176.2	5.28E-04	1.47E-04	core
175.2	1.15E-04	3.20E-05	core
174.2	1.59E-04	4.40E-05	core
173.2	5.28E-04	1.47E-04	core
172.2	5.28E-04	1.47E-04	core
171.2	8.91E-04	2.48E-04	core
170.2	8.91E-04	2.48E-04	core
169.2	5.28E-04	1.47E-04	core
168.2	1.39E-01	3.86E-02	core
167.2	2.18E-04	6.06E-05	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
166.2	5.28E-04	1.47E-04	core
165.2	5.28E-04	1.47E-04	core
164.2	1.50E-03	4.18E-04	core
163.2	2.54E-03	7.05E-04	core
162.2	8.91E-04	2.48E-04	core
161.2	1.50E-03	4.18E-04	core
160.2	8.91E-04	2.48E-04	core
159.2	8.91E-04	2.48E-04	core
158.2	5.28E-04	1.47E-04	core
157.2	8.36E-05	2.32E-05	core
156.2	2.72E-05	7.56E-06	core
155.2	4.41E-05	1.23E-05	core
154.2	5.28E-04	1.47E-04	core
153.2	8.91E-04	2.48E-04	core
152.2	8.91E-04	2.48E-04	core
151.2	1.15E+01	3.19E+00	core
150.2	1.82E+01	5.07E+00	core
149.2	2.90E+01	8.05E+00	core
148.2	7.23E+00	2.01E+00	core
146.2	4.55E+00	1.26E+00	core
145.2	2.86E+00	7.96E-01	core
144.2	1.15E+01	3.19E+00	core
143.2	1.15E+01	3.19E+00	core
141.2	1.82E+01	5.07E+00	core
140.2	4.55E+00	1.26E+00	core
139.2	1.80E+00	5.01E-01	core
136.2	7.23E+00	2.01E+00	core
131.2	1.21E-03	3.37E-04	core
130.2	2.18E-04	6.06E-05	core
129.2	1.15E+01	3.19E+00	core
126.2	1.15E+01	3.19E+00	core
125.2	1.80E+00	5.01E-01	core
124.2	2.86E+00	7.96E-01	core
123.2	2.18E-04	6.06E-05	core
122.2	1.15E-04	3.20E-05	core
121.2	4.55E+00	1.26E+00	core
120.2	2.90E+01	8.05E+00	core
119.2	2.07E+00	5.75E-01	core
118.2	2.05E-04	5.69E-05	core
116.2	2.18E-04	6.06E-05	core
115.2	1.80E+00	5.01E-01	core
114.2	3.45E+00	9.57E-01	core
113.2	2.27E+00	6.31E-01	core
112.2	4.77E+00	1.32E+00	core
111.2	1.86E-04	5.17E-05	core
110.2	3.38E-03	9.38E-04	core
109.2	2.73E-04	7.58E-05	core
108.2	1.54E-04	4.26E-05	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
107.2	2.02E-01	5.60E-02	core
106.2	1.92E-04	5.33E-05	core
105.2	1.35E-04	3.75E-05	core
104.2	2.18E-04	6.06E-05	core
101.2	6.49E-01	1.80E-01	core
100.2	1.72E-04	4.78E-05	core
99.2	2.17E+00	6.03E-01	core
98.2	5.23E-03	1.45E-03	core
95.2	8.20E-05	2.28E-05	core
91.2	9.71E-02	2.70E-02	core
90.2	1.92E-04	5.33E-05	core
89.2	2.49E+00	6.93E-01	core
88.2	3.78E+00	1.05E+00	core
87.2	6.59E+00	1.83E+00	core
86.2	4.55E+00	1.26E+00	core
85.2	3.78E+00	1.05E+00	core
84.2	2.17E+00	6.03E-01	core
83.2	1.92E-04	5.33E-05	core
82.2	5.23E-03	1.45E-03	core
81.2	1.31E-04	3.63E-05	core
80.2	2.57E-05	7.14E-06	core
79.2	2.57E-05	7.14E-06	core
78.2	2.32E-05	6.43E-06	core
77.2	3.12E-03	2.58E-03	perm
76.2	2.43E-05	6.74E-06	core
75.2	1.15E-04	3.20E-05	core
74.2	1.15E-04	3.20E-05	core
73.2	1.80E+00	5.01E-01	core
72.2	1.15E-04	3.20E-05	core
71.2	2.86E+00	7.96E-01	core
70.2	1.15E-04	3.20E-05	core
69.2	1.80E+00	5.01E-01	core
68.2	2.86E+00	7.96E-01	core
67.2	2.86E+00	7.96E-01	core
66.2	4.55E+00	1.26E+00	core
65.2	1.15E+01	3.19E+00	core
64.2	1.15E+01	3.19E+00	core
63.2	2.86E+00	7.96E-01	core
62.2	4.55E+00	1.26E+00	core
61.2	4.55E+00	1.26E+00	core
60.2	1.82E+01	5.07E+00	core
59.2	7.23E+00	2.01E+00	core
58.2	1.80E+00	5.01E-01	core
57.2	1.82E+01	5.07E+00	core
56.2	1.82E+01	5.07E+00	core
55.2	1.82E+01	5.07E+00	core
54.2	7.23E+00	2.01E+00	core
53.2	1.15E+01	3.19E+00	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
52.2	2.90E+01	8.05E+00	core
51.2	2.90E+01	8.05E+00	core
50.2	1.82E+01	5.07E+00	core
48.2	2.90E+01	8.05E+00	core
47.2	2.90E+01	8.05E+00	core
46.2	2.90E+01	8.05E+00	core
45.2	2.90E+01	8.05E+00	core
44.2	2.90E+01	8.05E+00	core
43.2	1.15E+01	3.19E+00	core
42.2	7.23E+00	2.01E+00	core
41.2	2.90E+01	8.05E+00	core
40.2	2.90E+01	8.05E+00	core
39.2	4.60E+01	1.28E+01	core
38.2	1.82E+01	5.07E+00	core
37.2	4.55E+00	1.26E+00	core
36.2	1.15E+01	3.19E+00	core
34.2	2.90E+01	8.05E+00	core
33.2	4.60E+01	1.28E+01	core
31.2	4.60E+01	1.28E+01	core
30.2	4.60E+01	1.28E+01	core
29.2	1.82E+01	5.07E+00	core
28.2	1.82E+01	5.07E+00	core
27.2	1.82E+01	5.07E+00	core
26.2	2.90E+01	8.05E+00	core
25.2	1.82E+01	5.07E+00	core
24.2	1.82E+01	5.07E+00	core
23.2	1.82E+01	5.07E+00	core
22.2	1.82E+01	5.07E+00	core
21.2	1.82E+01	5.07E+00	core
20.2	2.90E+01	8.05E+00	core
19.2	4.60E+01	1.28E+01	core
18.2	1.82E+01	5.07E+00	core
17.2	1.82E+01	5.07E+00	core
16.2	7.23E+00	2.01E+00	core
15.2	2.90E+01	8.05E+00	core
14.2	1.15E+01	3.19E+00	core
13.2	2.90E+01	8.05E+00	core
10.2	1.82E+01	5.07E+00	core
9.2	1.82E+01	5.07E+00	core
8.2	2.90E+01	8.05E+00	core
7.2	1.15E+01	3.19E+00	core
6.2	1.15E+01	3.19E+00	core
5.2	1.82E+01	5.07E+00	core
4.2	2.90E+01	8.05E+00	core
3.2	7.23E+00	2.01E+00	core
2.2	2.90E+01	8.05E+00	core
1.2	4.60E+01	1.28E+01	core
-1.8	2.90E+01	8.05E+00	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
-2.8	1.82E+01	5.07E+00	core
-3.8	1.82E+01	5.07E+00	core
-4.8	4.60E+01	1.28E+01	core
-5.8	4.60E+01	1.28E+01	core
-6.8	2.90E+01	8.05E+00	core
-8.8	2.90E+01	8.05E+00	core
-9.8	4.60E+01	1.28E+01	core
-10.8	2.43E-05	6.74E-06	core
-11.8	2.32E-05	6.43E-06	core
-12.8	2.32E-05	6.43E-06	core
-13.8	2.43E-05	6.74E-06	core
-14.8	2.57E-05	7.14E-06	core
-15.8	2.72E-05	7.56E-06	core
-16.8	2.43E-05	6.74E-06	core
-17.8	2.32E-05	6.43E-06	core
-18.8	2.32E-05	6.43E-06	core
-19.8	2.34E-05	6.51E-06	core
-20.8	2.32E-05	6.43E-06	core
-21.8	2.32E-05	6.43E-06	core
-22.8	2.34E-05	6.51E-06	core
-23.8	2.32E-05	6.43E-06	core
-24.8	2.32E-05	6.43E-06	core
-25.8	2.32E-05	6.43E-06	core
-26.8	2.32E-05	6.43E-06	core
-27.8	2.32E-05	6.43E-06	core
-28.8	2.32E-05	6.43E-06	core
-29.8	2.32E-05	6.43E-06	core
-30.8	2.43E-05	6.74E-06	core
-31.8	2.32E-05	6.43E-06	core
-32.8	2.32E-05	6.43E-06	core
-33.8	2.34E-05	6.51E-06	core
-34.8	2.57E-05	7.14E-06	core
-35.8	2.43E-05	6.74E-06	core
-36.8	2.34E-05	6.51E-06	core
-38.8	2.43E-05	6.74E-06	core
-39.8	2.57E-05	7.14E-06	core
-40.8	2.43E-05	6.74E-06	core
-43.8	2.32E-05	6.43E-06	core
-44.8	2.43E-05	6.74E-06	core
-48.8	2.86E+00	7.96E-01	core
-49.8	2.86E+00	7.96E-01	core
-50.8	4.55E+00	1.26E+00	core
-51.8	7.23E+00	2.01E+00	core
-52.8	1.15E+01	3.19E+00	core
-53.8	7.23E+00	2.01E+00	core
-54.8	4.55E+00	1.26E+00	core
-55.8	1.15E+01	3.19E+00	core
-56.8	1.82E+01	5.07E+00	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
-57.8	1.82E+01	5.07E+00	core
-58.8	1.80E+00	5.01E-01	core
-59.8	4.55E+00	1.26E+00	core
-60.8	7.23E+00	2.01E+00	core
-61.8	7.23E+00	2.01E+00	core
-62.8	4.55E+00	1.26E+00	core
-63.8	1.15E+01	3.19E+00	core
-64.8	1.82E+01	5.07E+00	core
-65.8	1.82E+01	5.07E+00	core
-66.8	1.82E+01	5.07E+00	core
-68.8	2.32E-05	6.43E-06	core
-71.8	2.32E-05	6.43E-06	core
-72.8	7.23E+00	2.01E+00	core
-74.8	4.55E+00	1.26E+00	core
-75.8	2.86E+00	7.96E-01	core
-76.8	4.55E+00	1.26E+00	core
-78.8	7.23E+00	2.01E+00	core
-79.8	1.15E+01	3.19E+00	core
-80.8	1.82E+01	5.07E+00	core
-81.8	1.15E+01	3.19E+00	core
-82.8	4.55E+00	1.26E+00	core
-83.8	1.15E+01	3.19E+00	core
-84.8	1.82E+01	5.07E+00	core
-85.8	1.15E+01	3.19E+00	core
-86.8	1.15E+01	3.19E+00	core
-87.8	1.82E+01	5.07E+00	core
-88.8	1.82E+01	5.07E+00	core
-89.8	1.82E+01	5.07E+00	core
-90.8	1.82E+01	5.07E+00	core
-91.8	2.90E+01	8.05E+00	core
-92.8	1.15E+01	3.19E+00	core
-93.8	1.15E+01	3.19E+00	core
-94.8	2.90E+01	8.05E+00	core
-95.8	1.15E+01	3.19E+00	core
-96.8	2.90E+01	8.05E+00	core
-97.8	2.90E+01	8.05E+00	core
-98.8	1.82E+01	5.07E+00	core
-99.8	1.82E+01	5.07E+00	core
-100.8	2.90E+01	8.05E+00	core
-101.8	2.90E+01	8.05E+00	core
-102.8	1.82E+01	5.07E+00	core
-103.8	4.55E+00	1.26E+00	core
-104.8	1.82E+01	5.07E+00	core
-105.8	4.55E+00	1.26E+00	core
-106.8	2.86E+00	7.96E-01	core
-107.8	1.15E+01	3.19E+00	core
-108.8	1.82E+01	5.07E+00	core
-109.8	1.15E+01	3.19E+00	core

Conductivity Data at P20

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
-110.8	1.82E+01	5.07E+00	core
-111.8	2.90E+01	8.05E+00	core
-112.8	4.55E+00	1.26E+00	core
-113.8	1.82E+01	5.07E+00	core
-114.8	2.90E+01	8.05E+00	core
-115.8	2.90E+01	8.05E+00	core
-116.8	1.15E+01	3.19E+00	core
-117.8	2.86E+00	7.96E-01	core
-118.8	1.80E+00	5.01E-01	core
-119.8	1.80E+00	5.01E-01	core
-120.8	4.55E+00	1.26E+00	core
-121.8	1.15E+01	3.19E+00	core
-122.8	1.80E+00	5.01E-01	core
-123.8	7.23E+00	2.01E+00	core
-125.8	1.15E+01	3.19E+00	core
-126.8	1.15E+01	3.19E+00	core
-128.8	1.82E+01	5.07E+00	core
-129.8	4.55E+00	1.26E+00	core
-130.8	1.82E+01	5.07E+00	core
-131.8	1.82E+01	5.07E+00	core
-132.8	1.15E+01	3.19E+00	core
-133.8	1.15E+01	3.19E+00	core
-135.8	4.55E+00	1.26E+00	core
-136.8	2.86E+00	7.96E-01	core
-137.8	2.86E+00	7.96E-01	core
-138.8	7.23E+00	2.01E+00	core
-139.8	7.23E+00	2.01E+00	core
-140.8	2.86E+00	7.96E-01	core
-141.8	4.55E+00	1.26E+00	core
-142.8	4.55E+00	1.26E+00	core
-143.8	4.55E+00	1.26E+00	core
-144.8	1.82E+01	5.07E+00	core
-145.8	1.15E+01	3.19E+00	core
-146.8	1.15E+01	3.19E+00	core
-148.8	2.90E+01	8.05E+00	core
-149.8	2.90E+01	8.05E+00	core
-150.8	7.23E+00	2.01E+00	core
-151.8	1.21E-03	3.37E-04	core
-153.8	1.82E+01	5.07E+00	core
-154.8	2.90E+01	8.05E+00	core
-155.8	1.82E+01	5.07E+00	core
-156.8	1.82E+01	5.07E+00	core
-158.8	2.86E+00	7.96E-01	core
-159.8	2.32E-05	6.43E-06	core
-160.8	2.86E+00	7.96E-01	core

Conductivity Data at RBW1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
283.5	3.28E+00	9.10E-01	cpt
282.5	4.91E+00	1.37E+00	cpt
281.5	6.52E+00	1.81E+00	cpt
280.5	5.58E+00	1.55E+00	cpt
279.5	5.11E+00	1.42E+00	cpt
278.5	2.62E-01	7.28E-02	cpt
277.5	1.50E-02	4.16E-03	cpt
276.5	3.93E+00	1.09E+00	cpt
275.5	9.59E-03	2.66E-03	cpt
274.5	9.04E+00	2.51E+00	cpt
273.5	7.33E+00	2.04E+00	cpt
272.5	6.93E+00	1.93E+00	cpt
271.5	1.41E+01	3.90E+00	cpt
270.5	1.24E+01	3.44E+00	cpt
269.5	9.57E+00	2.66E+00	cpt
268.5	2.09E-01	5.79E-02	cpt
267.5	1.05E+01	2.91E+00	cpt
266.5	9.33E+00	2.59E+00	cpt
265.5	7.99E+00	2.22E+00	cpt
264.5	8.50E+00	2.36E+00	cpt
263.5	8.92E+00	2.48E+00	cpt
262.5	7.98E+00	2.22E+00	cpt
261.5	7.25E+00	2.01E+00	cpt
260.5	7.64E+00	2.12E+00	cpt
259.5	9.08E+00	2.52E+00	cpt
258.5	9.25E+00	2.57E+00	cpt
257.5	9.40E+00	2.61E+00	cpt
256.5	7.03E+00	1.95E+00	cpt
255.5	5.55E+00	1.54E+00	cpt
254.5	7.29E+00	2.03E+00	cpt
253.5	7.13E+00	1.98E+00	cpt
252.5	7.54E+00	2.09E+00	cpt
251.5	8.45E+00	2.35E+00	cpt
250.5	9.82E+00	2.73E+00	cpt
249.5	9.68E+00	2.69E+00	cpt
248.5	9.00E+00	2.50E+00	cpt
247.5	8.71E+00	2.42E+00	cpt
246.5	5.89E+00	1.64E+00	cpt
245.5	3.16E+00	8.78E-01	cpt
244.5	5.48E+00	1.52E+00	cpt
243.5	7.30E+00	2.03E+00	cpt
242.5	8.19E+00	2.28E+00	cpt
241.5	6.53E+00	1.81E+00	cpt
240.5	5.82E+00	1.62E+00	cpt
239.5	1.04E-03	2.90E-04	cpt
238.5	6.04E-03	1.68E-03	cpt
237.5	6.77E-01	1.88E-01	cpt
236.5	1.44E+01	4.00E+00	cpt

Conductivity Data at RBW1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
235.5	1.45E+01	4.04E+00	cpt
234.5	1.53E+01	4.24E+00	cpt
233.5	2.36E+01	6.55E+00	cpt
232.5	3.35E+01	9.30E+00	cpt
231.5	3.68E+01	1.02E+01	cpt
230.5	3.06E+01	8.51E+00	cpt
229.5	2.84E+01	7.89E+00	cpt
228.5	3.67E+01	1.02E+01	cpt
227.5	4.92E+01	1.37E+01	cpt
226.5	5.76E+01	1.60E+01	cpt
225.5	6.23E+01	1.73E+01	cpt
224.5	5.12E+01	1.42E+01	cpt
223.5	4.62E+01	1.29E+01	cpt
222.5	7.27E+01	2.02E+01	cpt
221.5	1.00E+02	2.78E+01	cpt
220.5	9.60E+01	2.67E+01	cpt
219.5	1.07E+00	2.98E-01	cpt
218.5	7.70E-04	2.10E-04	cpt
217.5	3.68E-01	1.02E-01	cpt
216.5	2.95E+01	8.21E+00	cpt
215.5	4.13E+01	1.15E+01	cpt
214.5	3.77E+01	1.05E+01	cpt
213.5	3.97E+01	1.10E+01	cpt
212.5	5.59E+01	1.55E+01	cpt
211.5	1.00E+02	2.78E+01	cpt
210.5	7.12E+01	1.98E+01	cpt
209.5	9.20E-04	2.60E-04	cpt
208.5	5.41E+01	1.50E+01	cpt
207.5	2.99E+01	8.30E+00	cpt
206.5	4.36E+01	1.21E+01	cpt
205.5	1.33E-03	3.70E-04	cpt
204.5	4.00E+01	1.11E+01	cpt
203.5	5.51E+01	1.53E+01	cpt
202.5	5.10E+01	1.42E+01	cpt
201.5	8.99E+00	2.50E+00	cpt
200.5	1.87E-01	5.19E-02	cpt
199.5	4.92E-01	1.37E-01	cpt
198.5	6.60E-01	1.83E-01	cpt
197.5	1.70E-01	4.71E-02	cpt
196.5	5.51E-02	1.53E-02	cpt
195.5	1.17E-01	3.25E-02	cpt
194.5	4.40E-01	1.22E-01	cpt
193.5	4.31E+00	1.20E+00	cpt
192.5	7.77E+00	2.16E+00	cpt
191.5	3.92E+00	1.09E+00	cpt
190.5	8.23E+00	2.29E+00	cpt
189.5	8.94E+00	2.48E+00	cpt
188.5	9.76E+01	2.71E+01	cpt

Conductivity Data at RBW1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
187.5	2.58E+01	7.16E+00	cpt
186.5	2.85E+01	7.90E+00	cpt
185.5	1.96E+01	5.46E+00	cpt
184.5	3.83E+01	1.07E+01	cpt
183.5	4.97E+01	1.38E+01	cpt
182.5	6.47E+01	1.80E+01	cpt
181.5	6.10E+01	1.70E+01	cpt
180.5	6.02E+01	1.67E+01	cpt
179.5	7.44E+01	2.07E+01	cpt
178.5	7.80E+01	2.17E+01	cpt
177.5	1.00E+02	2.78E+01	cpt
176.5	9.70E+01	2.69E+01	cpt
175.5	8.18E+01	2.27E+01	cpt
174.5	5.22E+01	1.45E+01	cpt
173.5	1.54E+01	4.27E+00	cpt

Conductivity Data at RBW2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
324.6	3.48E+00	9.66E-01	cpt
323.6	4.08E+00	1.13E+00	cpt
322.6	4.49E+00	1.25E+00	cpt
321.6	9.92E-03	2.76E-03	cpt
320.6	9.06E-03	2.52E-03	cpt
319.6	7.81E-03	2.17E-03	cpt
318.6	6.39E-01	1.77E-01	cpt
317.6	1.76E-02	4.90E-03	cpt
316.6	1.87E-02	5.18E-03	cpt
315.6	6.60E-03	1.83E-03	cpt
314.6	2.93E-03	8.10E-04	cpt
313.6	2.45E-03	6.80E-04	cpt
312.6	2.88E-03	8.00E-04	cpt
311.6	2.31E-03	6.40E-04	cpt
310.6	1.12E-01	3.10E-02	cpt
309.6	8.70E-01	2.42E-01	cpt
308.6	2.27E-01	6.30E-02	cpt
307.6	8.78E+00	2.44E+00	cpt
306.6	6.53E-03	1.81E-03	cpt
305.6	3.67E-02	1.02E-02	cpt
304.6	8.30E+00	2.30E+00	cpt
303.6	1.00E+02	2.78E+01	cpt
302.6	2.21E+01	6.14E+00	cpt
301.6	2.24E+00	6.22E-01	cpt
300.6	1.15E-03	3.20E-04	cpt
299.6	9.06E+00	2.52E+00	cpt
298.6	4.50E-01	1.25E-01	cpt
297.6	8.50E-04	2.40E-04	cpt
296.6	6.06E+00	1.68E+00	cpt
295.6	6.12E+00	1.70E+00	cpt
294.6	3.72E+00	1.03E+00	cpt
293.6	1.04E+01	2.88E+00	cpt
292.6	8.90E+00	2.47E+00	cpt
291.6	6.75E+00	1.87E+00	cpt
290.6	7.13E+00	1.98E+00	cpt
289.6	1.68E+00	4.67E-01	cpt
288.6	2.00E-01	5.55E-02	cpt
287.6	2.40E-03	6.70E-04	cpt
286.6	3.03E-01	8.40E-02	cpt
285.6	1.25E-03	3.50E-04	cpt
284.6	5.91E+00	1.64E+00	cpt
283.6	6.23E+00	1.73E+00	cpt
282.6	7.00E+00	1.95E+00	cpt
281.6	6.25E+00	1.74E+00	cpt
280.6	6.21E+00	1.73E+00	cpt
279.6	9.50E-04	2.60E-04	cpt
278.6	1.62E-03	4.50E-04	cpt
277.6	1.07E-03	3.00E-04	cpt

Conductivity Data at RBW2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
276.6	1.30E-02	3.60E-03	cpt
275.6	5.97E-03	1.66E-03	cpt
274.6	1.37E-03	3.80E-04	cpt
273.6	1.89E-02	5.25E-03	cpt
272.6	7.00E+00	1.94E+00	cpt
271.6	7.92E+00	2.20E+00	cpt
270.6	7.71E+00	2.14E+00	cpt
269.6	1.32E-01	3.65E-02	cpt
268.6	1.56E-03	4.30E-04	cpt
267.6	5.31E+00	1.47E+00	cpt
266.6	7.69E+00	2.14E+00	cpt
265.6	5.06E+00	1.41E+00	cpt
264.6	8.08E-01	2.24E-01	cpt
263.6	4.42E+00	1.23E+00	cpt
262.6	6.50E+00	1.81E+00	cpt
261.6	7.22E+00	2.01E+00	cpt
260.6	7.47E+00	2.08E+00	cpt
259.6	6.55E+00	1.82E+00	cpt
258.6	5.77E+00	1.60E+00	cpt
257.6	6.34E+00	1.76E+00	cpt
256.6	5.49E+00	1.53E+00	cpt
255.6	6.38E+00	1.77E+00	cpt
254.6	5.58E+00	1.55E+00	cpt
253.6	9.21E-01	2.56E-01	cpt
252.6	3.65E-01	1.02E-01	cpt
251.6	1.15E-03	3.20E-04	cpt
250.6	2.13E+00	5.90E-01	cpt
249.6	5.09E+01	1.41E+01	cpt
248.6	1.98E-02	5.51E-03	cpt
247.6	2.94E-02	8.16E-03	cpt
246.6	8.88E+00	2.47E+00	cpt
245.6	1.29E+00	3.57E-01	cpt
244.6	1.98E+00	5.49E-01	cpt
243.6	9.83E+00	2.73E+00	cpt
242.6	6.86E+00	1.90E+00	cpt
241.6	6.91E+00	1.92E+00	cpt
240.6	3.26E+00	9.07E-01	cpt
239.6	2.30E-01	6.39E-02	cpt
238.6	6.60E-02	1.83E-02	cpt
237.6	1.79E+01	4.96E+00	cpt
236.6	1.79E+01	4.98E+00	cpt
235.6	1.76E+01	4.88E+00	cpt
234.6	5.29E+00	1.47E+00	cpt
233.6	1.42E+01	3.95E+00	cpt
232.6	1.76E+01	4.89E+00	cpt
231.6	2.02E+01	5.61E+00	cpt
230.6	2.43E+01	6.75E+00	cpt
229.6	1.21E+01	3.37E+00	cpt

Conductivity Data at RBW2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
228.6	9.96E+00	2.77E+00	cpt
227.6	1.99E+00	5.52E-01	cpt
226.6	7.06E+00	1.96E+00	cpt
225.6	1.46E-01	4.07E-02	cpt
224.6	4.44E+01	1.23E+01	cpt
223.6	4.57E+01	1.27E+01	cpt
222.6	5.22E+01	1.45E+01	cpt
221.6	5.90E+01	1.64E+01	cpt
220.6	5.67E+01	1.58E+01	cpt
219.6	4.31E+01	1.20E+01	cpt
218.6	3.66E+01	1.02E+01	cpt
217.6	3.91E+01	1.09E+01	cpt
216.6	2.98E+01	8.28E+00	cpt
215.6	5.28E+01	1.47E+01	cpt
214.6	5.47E+01	1.52E+01	cpt
213.6	2.03E+01	5.65E+00	cpt
212.6	1.68E+01	4.68E+00	cpt
211.6	4.48E+01	1.25E+01	cpt
210.6	4.88E+01	1.36E+01	cpt
209.6	4.54E+01	1.26E+01	cpt
208.6	4.61E+01	1.28E+01	cpt
207.6	6.68E+01	1.86E+01	cpt
206.6	1.00E+02	2.78E+01	cpt
205.6	1.00E+02	2.78E+01	cpt
201.6	1.00E+02	2.78E+01	cpt
200.6	1.00E+02	2.78E+01	cpt
195.6	1.00E+02	2.78E+01	cpt
192.6	1.00E+02	2.78E+01	cpt
191.6	1.00E+02	2.78E+01	cpt
187.6	1.01E-03	2.80E-04	cpt
186.6	3.67E-03	1.02E-03	cpt
185.6	4.50E-03	1.25E-03	cpt
181.6	3.86E+01	1.07E+01	cpt
180.6	6.87E+01	1.91E+01	cpt
178.6	1.00E+02	2.78E+01	cpt
164.8	7.89E+00	2.19E+00	perm
163.6	1.05E+01	2.91E+00	perm
160.6	5.54E+01	1.54E+01	core
159.6	3.49E+01	9.69E+00	core
158.8	1.46E+01	4.06E+00	perm
157.8	1.20E+01	3.33E+00	perm
154.6	4.60E+01	1.28E+01	core
153.6	4.60E+01	1.28E+01	core
152.6	4.60E+01	1.28E+01	core
151.6	1.00E+02	2.78E+01	cpt
150.6	1.00E+02	2.78E+01	cpt
149.7	3.85E+01	1.07E+01	perm
148.6	4.39E+01	1.22E+01	perm

Conductivity Data at RBW2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
146.6	3.89E+01	1.08E+01	cpt
145.6	3.51E+01	9.76E+00	cpt
144.6	3.49E+01	9.69E+00	core
143.1	3.41E+01	9.47E+00	perm
141.6	1.10E+00	3.04E-01	cpt
140.6	3.84E+01	1.07E+01	cpt
139.8	4.84E+01	1.34E+01	perm
139.1	3.79E+01	1.05E+01	perm
138.6	5.05E+01	1.40E+01	core
137.5	2.72E+01	7.56E+00	perm
137.1	5.12E+01	1.42E+01	perm
136.6	3.49E+01	9.69E+00	core
135.1	2.46E+01	6.83E+00	perm
134.1	3.87E-01	1.08E-01	perm
133.6	4.27E+01	1.19E+01	core
132.3	1.89E+00	5.25E-01	perm
131.6	6.76E-01	1.88E-01	perm
130.6	2.77E+01	7.68E+00	core
129.7	1.74E+00	4.84E-01	perm
128.6	3.62E+01	1.01E+01	core
127.8	1.75E+00	4.87E-01	perm
127.1	1.61E+00	4.47E-01	perm
126.6	1.28E+01	3.56E+00	core
125.1	2.31E+00	6.41E-01	perm
124.1	4.42E+00	1.23E+00	perm
123.6	2.41E+01	6.69E+00	core
122.8	3.26E+00	9.04E-01	perm
122.1	6.55E+00	1.82E+00	perm
121.1	1.09E+01	3.02E+00	perm
120.1	6.16E+00	1.71E+00	perm
119.6	2.64E+01	7.34E+00	core
118.9	1.20E+00	3.34E-01	perm
118.1	1.39E+00	3.87E-01	perm
117.1	1.97E+00	5.47E-01	perm
116.6	3.62E+01	1.01E+01	core
115.8	1.29E+00	3.59E-01	perm
114.9	4.08E+00	1.13E+00	perm
114.1	2.11E+00	5.86E-01	perm
113.1	1.27E+00	3.51E-01	perm
112.6	7.86E+00	2.18E+00	core
111.8	3.50E+00	9.72E-01	perm
111.1	2.24E+00	6.22E-01	perm
110.1	7.97E-01	2.21E-01	perm
109.1	3.84E-01	1.07E-01	perm
108.6	1.25E+01	3.47E+00	core
104.5	1.01E+01	2.81E+00	perm
103.8	1.14E+01	3.17E+00	perm
102.8	1.58E-01	4.39E-02	perm

Conductivity Data at RBW2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
100.1	4.78E+00	1.33E+00	perm
99.1	1.08E+01	3.00E+00	perm
98.6	3.83E+01	1.06E+01	core
97.8	1.27E+01	3.53E+00	perm
96.7	1.02E+01	2.83E+00	perm
95.1	6.86E+00	1.91E+00	perm
94.6	1.82E+01	5.07E+00	core
93.9	1.91E+00	5.31E-01	perm
93.1	3.55E+00	9.87E-01	perm
92.6	2.90E+01	8.05E+00	core
91.6	1.80E+00	5.01E-01	core
89.9	3.07E+00	8.52E-01	perm
88.6	2.51E-05	6.97E-06	core
87.6	2.40E-05	6.66E-06	core
86.6	2.40E-05	6.66E-06	core
85.6	2.57E-05	7.14E-06	core
84.6	1.80E+00	5.01E-01	core
83.6	4.55E+00	1.26E+00	core
82.8	6.53E+01	1.81E+01	perm
79.1	5.34E+01	1.48E+01	perm
78.1	4.76E+01	1.32E+01	perm
77.1	5.32E+01	1.48E+01	perm
76.6	7.24E+01	2.01E+01	core

Conductivity Data at RBW2CU

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
204.9	7.74E+00	3.87E-02	perm
204.2	1.52E+01	7.58E-02	perm
203.2	1.12E+01	5.58E-02	perm
202.7	5.05E+01	1.40E+01	core
199.8	1.37E+01	6.82E-02	perm
199.2	1.47E+01	7.35E-02	perm
198.7	4.60E+01	1.28E+01	core
197.8	2.06E+01	1.03E-01	perm
196.9	2.60E+01	1.30E-01	perm
196.2	4.03E+01	2.02E-01	perm
194.8	2.60E+01	1.30E-01	perm
194.2	3.06E+01	1.53E-01	perm
193.7	4.19E+01	1.16E+01	core
190.2	3.98E+01	1.99E-01	perm
189.7	5.54E+01	1.54E+01	core
188.7	5.28E-04	1.47E-04	core
185.0	1.10E+01	5.50E-02	perm
184.2	2.79E+01	1.39E-01	perm
183.2	3.32E+01	1.66E-01	perm
182.7	1.39E-01	3.86E-02	core
180.0	3.67E+01	1.84E-01	perm
177.7	4.41E-05	1.23E-05	core
176.8	8.91E+00	4.46E-02	perm
175.2	1.38E+01	6.91E-02	perm
174.7	2.54E-03	7.05E-04	core
173.8	1.15E+01	5.73E-02	perm
173.2	4.33E+01	2.17E-01	perm
172.7	8.91E-04	2.48E-04	core
171.7	8.36E-05	2.32E-05	core
170.7	8.36E-05	2.32E-05	core
169.7	4.41E-05	1.23E-05	core
168.7	3.20E-05	8.90E-06	core
167.4	7.08E+00	1.97E+00	perm
166.8	2.47E+01	6.85E+00	perm
166.2	4.80E+01	1.33E+01	perm
165.7	4.30E+00	1.20E+00	core
164.8	1.16E+01	3.21E+00	perm
164.2	5.62E+00	1.56E+00	perm
162.7	1.05E+01	2.91E+00	perm
162.2	2.66E+01	7.40E+00	perm
161.2	3.32E+01	9.21E+00	perm
160.7	5.05E+01	1.40E+01	core
159.7	2.34E+00	6.49E-01	core
158.5	2.69E+01	7.46E+00	perm
157.9	2.31E+01	6.40E+00	perm
157.2	1.62E+01	4.50E+00	perm
156.2	2.97E+01	8.25E+00	perm
155.2	5.27E+01	1.47E+01	perm

Conductivity Data at RBW2CU

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
154.7	3.18E+01	8.83E+00	core
153.7	3.49E+01	9.69E+00	core
152.7	3.49E+01	9.69E+00	core
149.8	3.44E+01	9.55E+00	perm
147.7	4.60E+01	1.28E+01	core
144.7	4.60E+01	1.28E+01	core
143.7	5.54E+01	1.54E+01	core
142.9	3.22E+01	8.95E+00	perm

Conductivity Data at RCH1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
302.1	3.73E+00	1.04E+00	cpt
301.1	5.99E+00	1.66E+00	cpt
300.1	3.70E-04	1.00E-04	cpt
299.1	5.43E+00	1.51E+00	cpt
298.1	4.16E-03	1.15E-03	cpt
296.6	1.01E-02	2.81E-03	perm
295.1	2.33E-03	6.50E-04	cpt
294.1	3.45E-03	9.60E-04	cpt
293.1	2.38E-03	6.60E-04	cpt
291.6	9.35E-03	3.97E-03	perm
290.4	6.03E+00	6.03E-02	perm
289.1	2.87E+00	7.97E-01	core
288.1	3.36E-03	9.30E-04	cpt
287.1	2.84E-01	7.89E-02	core
286.1	2.84E-01	7.89E-02	core
285.3	3.59E+00	3.59E-02	perm
284.1	4.56E+00	1.27E+00	core
283.1	4.04E-01	1.12E-01	cpt
281.6	4.79E-03	1.33E-03	perm
280.4	1.39E+01	1.39E-01	perm
279.6	8.59E+00	8.59E-02	perm
278.3	2.47E+00	2.47E-02	perm
276.6	4.50E-02	1.25E-02	perm
275.6	1.11E+01	1.11E-01	perm
274.6	1.35E+01	1.35E-01	perm
273.6	1.53E+01	1.53E-01	perm
272.3	9.29E+00	9.29E-02	perm
271.6	1.33E+00	1.33E-02	perm
270.6	1.95E+01	1.95E-01	perm
269.6	1.94E+01	1.94E-01	perm
268.6	1.83E+01	1.83E-01	perm
267.6	1.01E+01	1.01E-01	perm
266.6	1.11E+01	1.11E-01	perm
265.6	1.00E+01	1.00E-01	perm
264.3	6.46E+00	6.46E-02	perm
263.6	4.41E+00	4.41E-02	perm
262.4	7.90E-01	7.90E-03	perm
261.3	1.00E+00	1.00E-02	perm
260.6	1.25E+01	1.25E-01	perm
259.1	1.15E+01	3.19E+00	core
257.6	1.75E+00	1.75E-02	perm
256.3	1.52E+01	1.52E-01	perm
255.2	2.04E+01	2.04E-01	perm
254.6	5.61E+00	5.61E-02	perm
253.1	1.92E+01	5.33E+00	cpt
252.3	1.94E+01	1.94E-01	perm
251.6	2.69E+00	2.69E-02	perm
250.3	5.12E+00	5.12E-02	perm

Conductivity Data at RCH1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
249.1	1.08E+01	3.00E+00	cpt
247.6	6.52E-01	4.54E-02	perm
246.6	2.90E+00	2.90E-02	perm
245.4	9.80E-01	4.90E-03	perm
244.6	1.23E+01	6.15E-02	perm
243.4	1.12E+01	5.60E-02	perm
242.6	2.87E+01	1.44E-01	perm
241.6	4.11E+01	2.06E-01	perm
240.3	2.67E+01	1.34E-01	perm
239.6	3.57E+01	1.78E-01	perm
238.1	3.98E+01	1.10E+01	cpt
237.4	2.90E+01	1.45E-01	perm
236.6	3.15E+01	1.58E-01	perm
235.6	2.46E+01	1.23E-01	perm
234.6	1.77E+01	8.87E-02	perm
233.6	1.54E+01	7.71E-02	perm
232.1	5.41E+00	2.71E-02	perm
231.2	1.07E+01	5.36E-02	perm
230.6	4.80E+00	2.40E-02	perm
229.3	1.91E+01	9.54E-02	perm
228.3	1.16E+01	5.80E-02	perm
227.3	2.13E+01	1.07E-01	perm
226.3	1.63E+01	8.16E-02	perm
225.5	2.23E+01	1.12E-01	perm
224.1	1.39E-01	3.86E-02	core
222.6	4.50E+01	2.25E-01	perm
221.6	2.70E+01	1.35E-01	perm
220.6	2.62E+01	1.31E-01	perm
219.6	2.70E+01	1.35E-01	perm
217.6	3.09E+01	1.55E-01	perm
216.6	3.07E+01	1.54E-01	perm
215.6	4.65E+01	2.33E-01	perm
214.6	9.00E+01	4.50E-01	perm
213.6	9.15E+01	4.57E-01	perm
211.6	1.22E+02	6.08E-01	perm
210.1	2.52E+01	6.99E+00	cpt
207.6	1.11E+02	5.56E-01	perm
206.6	1.00E+02	5.01E-01	perm
205.6	4.90E+01	2.45E-01	perm
202.1	5.28E-04	1.47E-04	core
201.4	3.18E+01	1.59E-01	perm
200.6	2.80E+01	1.40E-01	perm
199.6	6.22E+01	3.11E-01	perm
198.6	6.24E+01	3.12E-01	perm
197.6	5.18E+01	2.59E-01	perm
196.6	4.35E+01	2.18E-01	perm
195.6	6.40E+01	3.20E-01	perm
194.6	6.47E+01	3.24E-01	perm

Conductivity Data at RCH1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
192.6	7.70E+01	3.85E-01	perm
191.6	2.82E+01	1.41E-01	perm
190.6	9.23E+01	4.61E-01	perm
189.6	7.76E+01	3.88E-01	perm
188.6	6.73E+01	3.37E-01	perm
187.6	1.02E+02	5.10E-01	perm
186.6	2.78E+01	1.39E-01	perm
185.6	7.59E+01	3.80E-01	perm
184.6	8.79E+01	4.40E-01	perm
183.6	8.31E+01	4.15E-01	perm
182.4	7.57E+01	3.78E-01	perm
181.6	7.46E+01	3.73E-01	perm
180.6	5.70E+01	2.85E-01	perm
179.6	3.45E+01	1.73E-01	perm
178.1	2.72E-05	7.56E-06	core
176.6	1.53E-02	4.25E-03	perm
175.0	2.72E+01	7.57E+00	perm
174.4	5.55E+01	1.54E+01	perm
173.0	3.62E+01	1.01E+01	perm
172.6	9.21E+01	2.56E+01	perm
171.3	6.45E+01	1.79E+01	perm
170.6	9.96E+01	2.77E+01	perm
169.6	1.12E+02	3.12E+01	perm
168.6	7.38E+01	2.05E+01	perm
167.6	9.22E+01	2.56E+01	perm
166.6	1.13E+02	3.15E+01	perm
164.6	8.46E+01	2.35E+01	perm
162.6	6.30E+01	1.75E+01	perm
161.6	1.07E+02	2.98E+01	perm
160.6	9.43E+01	2.62E+01	perm
159.6	1.35E+02	3.76E+01	perm
157.6	4.82E+01	1.34E+01	perm
156.6	5.15E+01	1.43E+01	perm
155.6	8.43E+01	2.34E+01	perm
154.0	5.38E+01	1.49E+01	perm
153.6	5.00E+01	1.39E+01	perm
152.2	5.54E+01	1.54E+01	perm
151.1	6.08E+01	1.69E+01	core
150.1	6.08E+01	1.69E+01	core
149.1	6.08E+01	1.69E+01	core
147.1	6.67E+01	1.85E+01	core
146.1	6.67E+01	1.85E+01	core
145.1	6.67E+01	1.85E+01	core
144.1	6.67E+01	1.85E+01	core
143.1	6.67E+01	1.85E+01	core
142.1	6.67E+01	1.85E+01	core
141.1	6.67E+01	1.85E+01	core
140.1	6.67E+01	1.85E+01	core

Conductivity Data at RCH1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
139.1	6.67E+01	1.85E+01	core
138.1	6.67E+01	1.85E+01	core
137.1	3.72E+01	1.03E+01	core
136.1	3.72E+01	1.03E+01	core
135.1	3.04E+01	8.43E+00	core
134.1	3.97E+01	1.10E+01	core
133.1	3.76E+01	1.04E+01	core
132.1	4.27E+01	1.19E+01	core
131.1	5.14E+01	1.43E+01	core
130.1	5.14E+01	1.43E+01	core
127.1	3.06E+01	8.51E+00	core
126.1	4.52E+01	1.26E+01	core
125.1	3.93E+01	1.09E+01	core
124.1	3.93E+01	1.09E+01	core
123.1	3.93E+01	1.09E+01	core
122.1	5.63E+00	1.56E+00	core
121.1	6.47E+00	1.80E+00	core
120.1	3.38E+00	9.40E-01	core
106.6	2.88E+00	8.00E-01	perm
105.1	3.96E+00	1.10E+00	core
104.1	2.48E-04	6.89E-05	core
103.1	5.34E-05	1.48E-05	core
102.1	1.15E-04	3.20E-05	core
101.1	2.71E-05	7.54E-06	core
100.1	2.56E-05	7.11E-06	core
99.1	2.65E-05	7.35E-06	core
98.1	2.61E-05	7.25E-06	core
97.1	2.69E-05	7.46E-06	core
96.1	4.14E-05	1.15E-05	core
95.1	3.76E-05	1.04E-05	core
94.1	2.72E-05	7.56E-06	core
93.1	2.56E-05	7.10E-06	core
92.1	2.54E-05	7.05E-06	core
91.1	1.15E+01	3.19E+00	core
90.1	1.82E+01	5.07E+00	core
89.1	4.60E+01	1.28E+01	core

Conductivity Data at RCP1A

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
221.3	3.82E+01	1.06E+01	core
220.3	2.89E+01	8.04E+00	core
219.3	1.82E+01	5.06E+00	core
218.3	2.89E+01	8.04E+00	core
217.3	3.48E+01	9.67E+00	core
216.3	2.89E+01	8.04E+00	core
215.3	3.48E+01	9.67E+00	core
214.3	4.19E+01	1.16E+01	core
213.3	4.60E+01	1.28E+01	core
212.3	3.82E+01	1.06E+01	core
211.3	1.82E+01	5.06E+00	core
210.3	1.15E-04	3.20E-05	core
209.3	1.50E-03	4.18E-04	core
208.3	2.89E+01	8.04E+00	core
207.3	2.89E+01	8.04E+00	core
206.3	4.19E+01	1.16E+01	core
205.3	3.82E+01	1.06E+01	core
204.3	5.05E+01	1.40E+01	core
203.3	5.05E+01	1.40E+01	core
202.3	4.60E+01	1.28E+01	core
201.3	4.60E+01	1.28E+01	core
200.3	3.82E+01	1.06E+01	core
199.3	2.89E+01	8.04E+00	core
198.3	2.89E+01	8.04E+00	core
197.3	3.48E+01	9.67E+00	core
196.3	3.48E+01	9.67E+00	core
195.3	3.48E+01	9.67E+00	core
194.3	3.82E+01	1.06E+01	core
193.3	4.60E+01	1.28E+01	core
192.3	4.60E+01	1.28E+01	core
191.3	5.05E+01	1.40E+01	core
190.3	4.19E+01	1.16E+01	core
189.3	3.48E+01	9.67E+00	core
188.3	2.89E+01	8.04E+00	core
187.3	2.89E+01	8.04E+00	core
186.3	3.48E+01	9.67E+00	core
185.3	3.48E+01	9.67E+00	core
184.3	5.05E+01	1.40E+01	core
183.3	3.82E+01	1.06E+01	core
182.3	2.89E+01	8.04E+00	core
181.3	1.82E+01	5.06E+00	core
180.3	1.82E+01	5.06E+00	core
179.3	1.59E-04	4.40E-05	core
178.3	4.41E-05	1.23E-05	core
177.3	2.54E-03	7.05E-04	core
176.3	1.39E-01	3.86E-02	core
175.3	1.82E+01	5.06E+00	core
172.3	1.39E-01	3.86E-02	core

Conductivity Data at RCP1A

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
171.3	1.82E+01	5.06E+00	core
170.3	2.89E+01	8.04E+00	core
169.3	2.89E+01	8.04E+00	core
168.3	2.89E+01	8.04E+00	core
167.3	1.82E+01	5.06E+00	core
166.3	1.39E-01	3.86E-02	core
165.3	5.28E-04	1.47E-04	core
164.3	3.13E-04	8.69E-05	core
163.3	1.82E+01	5.06E+00	core
162.3	2.54E-03	7.05E-04	core
161.3	7.23E+00	2.01E+00	core
160.3	7.23E+00	2.01E+00	core
159.3	1.82E+01	5.07E+00	core
158.3	2.90E+01	8.05E+00	core
157.3	4.60E+01	1.28E+01	core
156.3	7.23E+00	2.01E+00	core
155.3	7.23E+00	2.01E+00	core
154.3	1.82E+01	5.07E+00	core
153.3	1.82E+01	5.07E+00	core
152.3	1.21E-03	3.37E-04	core
151.3	1.82E+01	5.07E+00	core
150.3	2.86E+00	7.96E-01	core
149.3	2.86E+00	7.96E-01	core
148.3	4.55E+00	1.26E+00	core
147.3	1.82E+01	5.07E+00	core
146.3	1.82E+01	5.07E+00	core
145.3	7.23E+00	2.01E+00	core
144.3	7.23E+00	2.01E+00	core
143.3	1.15E+01	3.19E+00	core
142.3	1.82E+01	5.07E+00	core
141.3	4.55E+00	1.26E+00	core
140.3	7.23E+00	2.01E+00	core
139.3	7.23E+00	2.01E+00	core
138.3	1.82E+01	5.07E+00	core
137.3	3.49E+01	9.69E+00	core
136.3	2.90E+01	8.05E+00	core
135.3	2.90E+01	8.05E+00	core
134.3	2.90E+01	8.05E+00	core
133.3	2.90E+01	8.05E+00	core
132.3	2.90E+01	8.05E+00	core
131.3	1.21E-03	3.37E-04	core
130.3	7.23E+00	2.01E+00	core
129.3	7.23E+00	2.01E+00	core
128.3	7.23E+00	2.01E+00	core
127.3	7.23E+00	2.01E+00	core
126.3	2.90E+01	8.05E+00	core
125.3	2.90E+01	8.05E+00	core
124.3	1.15E+01	3.19E+00	core

Conductivity Data at RCP1A

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
123.3	2.90E+01	8.05E+00	core
122.3	1.82E+01	5.07E+00	core
121.3	1.82E+01	5.07E+00	core
120.3	4.20E+01	1.17E+01	core
119.3	5.05E+01	1.40E+01	core
118.3	5.54E+01	1.54E+01	core
117.3	3.49E+01	9.69E+00	core
116.3	5.54E+01	1.54E+01	core
115.3	2.07E-04	5.76E-05	core
114.3	5.45E-05	1.51E-05	core
113.3	6.90E-05	1.92E-05	core
112.3	1.18E-04	3.28E-05	core
111.3	1.24E-04	3.45E-05	core
102.3	6.11E-05	1.70E-05	core
101.3	8.69E-05	2.41E-05	core
100.3	5.18E-05	1.44E-05	core
99.3	5.18E-05	1.44E-05	core
98.3	8.23E+00	2.29E+00	core
97.3	4.91E+01	1.36E+01	core
96.3	1.26E-04	3.50E-05	core
95.3	3.29E+00	9.14E-01	core
94.3	4.47E-05	1.24E-05	core
93.3	5.96E-05	1.66E-05	core
92.3	9.62E-05	2.67E-05	core
91.3	8.80E-05	2.44E-05	core
90.3	2.56E+00	7.12E-01	core
82.3	1.88E-04	5.23E-05	core
72.3	8.36E-05	2.32E-05	core
71.3	1.15E+01	3.19E+00	core
70.3	1.15E+01	3.19E+00	core
69.3	1.82E+01	5.07E+00	core
68.3	1.82E+01	5.07E+00	core
67.3	1.15E+01	3.19E+00	core
66.3	1.82E+01	5.07E+00	core
65.3	2.90E+01	8.05E+00	core
64.3	7.23E+00	2.01E+00	core
63.3	2.90E+01	8.05E+00	core
62.3	7.23E+00	2.01E+00	core
61.3	3.49E+01	9.69E+00	core
60.3	4.60E+01	1.28E+01	core
59.3	4.20E+01	1.17E+01	core
58.3	3.49E+01	9.69E+00	core
57.3	2.90E+01	8.05E+00	core
56.3	4.20E+01	1.17E+01	core
55.3	3.49E+01	9.69E+00	core
54.3	3.49E+01	9.69E+00	core
53.3	3.49E+01	9.69E+00	core
52.3	3.83E+01	1.06E+01	core

Conductivity Data at RCP1A

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
51.3	4.60E+01	1.28E+01	core
50.3	4.60E+01	1.28E+01	core
49.3	4.60E+01	1.28E+01	core
48.3	4.60E+01	1.28E+01	core
47.3	4.60E+01	1.28E+01	core

Conductivity Data at RPC1CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
303.8	3.51E+00	9.74E-01	cpt
302.8	4.03E+00	1.12E+00	cpt
301.8	4.80E+00	1.33E+00	cpt
300.8	4.79E+00	1.33E+00	cpt
299.8	4.16E+00	1.15E+00	cpt
298.8	4.78E+00	1.33E+00	cpt
297.8	5.00E+00	1.39E+00	cpt
296.8	5.71E+00	1.59E+00	cpt
295.8	8.63E+00	2.40E+00	cpt
294.8	5.08E-01	1.41E-01	cpt
293.8	7.24E+00	2.01E+00	core
292.3	1.55E+00	4.31E-01	perm
290.8	7.24E+00	2.01E+00	core
289.9	3.27E+00	9.08E-01	perm
288.8	1.15E+01	3.19E+00	core
287.6	7.40E-01	2.06E-01	perm
286.8	7.24E+00	2.01E+00	core
285.7	6.10E-01	1.69E-01	perm
284.3	3.40E+00	3.40E-02	perm
283.1	3.66E+00	3.66E-02	perm
282	1.39E+00	1.39E-02	perm
280.5	1.03E+00	1.03E-02	perm
279.8	1.81E+00	5.02E-01	core
278.8	1.14E+00	3.16E-01	core
277.8	1.14E+00	3.16E-01	core
276.8	1.14E+00	3.16E-01	core
275.8	1.14E+00	3.16E-01	core
274.3	1.12E-02	3.12E-03	perm
272.8	1.14E+00	3.16E-01	core
271.8	1.81E+00	5.02E-01	core
270.8	4.51E-01	1.25E-01	core
269.8	7.10E-04	2.00E-04	cpt
268.8	1.14E+00	3.16E-01	core
267.8	1.81E+00	5.02E-01	core
266.8	2.87E+00	7.97E-01	core
265.8	6.30E-04	1.70E-04	cpt
264.8	6.00E-04	1.70E-04	cpt
264	8.60E-01	8.60E-03	perm
262.9	2.55E+00	2.55E-02	perm
261.8	6.20E-04	1.70E-04	cpt
260.8	5.36E+00	1.49E+00	cpt
259.3	2.50E+00	2.50E-02	perm
258.1	3.73E+00	3.73E-02	perm
256.8	3.75E+00	3.75E-02	perm
256.3	2.65E+00	2.65E-02	perm
254.8	5.54E+00	1.54E+00	cpt
254	3.88E+00	3.88E-02	perm
252.8	1.69E+00	1.69E-02	perm

Conductivity Data at RPC1CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
251.8	1.81E+00	5.02E-01	core
250.8	5.28E+00	1.47E+00	cpt
249.8	8.90E-04	2.50E-04	cpt
248.8	4.56E+00	1.27E+00	core
248	1.60E+00	1.60E-02	perm
247.3	1.65E+00	1.65E-02	perm
246.3	1.84E+00	1.84E-02	perm
245.3	6.70E-01	6.70E-03	perm
243.9	7.20E-01	7.20E-03	perm
242.8	1.81E+00	5.02E-01	core
241.8	1.81E+00	5.02E-01	core
240.8	1.15E+01	3.19E+00	core
239.3	4.40E+00	4.40E-02	perm
238.3	2.79E+00	2.79E-02	perm
237.3	1.58E+00	1.58E-02	perm
236.3	2.80E+00	2.80E-02	perm
234.9	3.73E+00	3.73E-02	perm
234.2	3.84E+00	3.84E-02	perm
233.3	2.87E+00	2.87E-02	perm
232.3	2.21E+00	2.21E-02	perm
230.3	2.01E+00	1.01E-02	perm
228.3	7.96E-03	2.21E-03	perm
227.3	1.43E-02	3.97E-03	perm
227.3	2.65E+00	1.33E-02	perm
226	1.97E+00	9.85E-03	perm
225.3	1.36E+01	6.81E-02	perm
224	1.35E+01	6.76E-02	perm
223.3	1.72E+01	8.60E-02	perm
222.3	1.82E+01	9.09E-02	perm
220.8	1.41E+01	3.92E+00	cpt
219.3	4.64E+00	2.32E-02	perm
218.3	1.31E+01	6.56E-02	perm
217.3	1.18E+01	5.92E-02	perm
216.3	1.57E+01	7.83E-02	perm
215.3	1.66E+01	8.32E-02	perm
214.3	1.20E+01	5.99E-02	perm
213.3	5.73E+00	2.87E-02	perm
212.3	3.55E+00	1.78E-02	perm
211.3	8.68E+00	4.34E-02	perm
209.8	2.00E+01	5.55E+00	cpt
208.3	5.31E+00	2.66E-02	perm
206.8	5.05E+01	1.40E+01	core
205.8	4.60E+01	1.28E+01	core
204.3	1.23E+01	6.13E-02	perm
202.8	5.05E+01	1.40E+01	core
201.8	5.05E+01	1.40E+01	core
200.8	4.19E+01	1.16E+01	core
199.8	5.05E+01	1.40E+01	core

Conductivity Data at RPC1CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
198.8	5.54E+01	1.54E+01	core
197.3	9.21E+00	4.61E-02	perm
196	4.18E+01	2.09E-01	perm
195.3	4.29E+01	2.14E-01	perm
193.8	5.05E+01	1.40E+01	core
192.8	5.05E+01	1.40E+01	core
191.8	4.60E+01	1.28E+01	core
190.8	3.82E+01	1.06E+01	core
189.8	3.48E+01	9.67E+00	core
188.8	6.07E+01	1.69E+01	core
187.8	6.07E+01	1.69E+01	core
186.8	5.54E+01	1.54E+01	core
185.8	4.19E+01	1.16E+01	core
184.8	4.19E+01	1.16E+01	core
184.1	4.37E+01	2.19E-01	perm
182.8	4.19E+01	1.16E+01	core
181.8	3.48E+01	9.67E+00	core
180.8	9.30E-04	2.60E-04	cpt
179.8	5.30E-04	1.50E-04	cpt
178.8	1.15E-04	3.20E-05	core
177.3	4.07E+00	1.13E+00	perm
177.1	5.62E+01	2.81E-01	perm
176.3	7.74E-01	2.15E-01	perm
176.3	6.03E+01	3.01E-01	perm
175.3	4.79E+01	2.40E-01	perm
173.8	1.39E-01	3.86E-02	core
172.3	6.50E+01	3.25E-01	perm
171.3	5.01E+01	2.50E-01	perm
170.3	4.26E+01	2.13E-01	perm
169.3	5.23E+01	2.62E-01	perm
167.8	3.76E+01	1.88E-01	perm
166.8	7.87E+00	3.94E-02	perm
166.3	1.91E+01	9.55E-02	perm
164.8	2.54E-03	7.05E-04	core
163.8	1.82E+01	5.06E+00	core
162.8	2.89E+01	8.04E+00	core
161.8	2.54E-03	7.05E-04	core
160.8	1.39E-01	3.86E-02	core
159.8	1.18E+01	3.28E+00	cpt
158.3	6.62E-03	1.84E-03	perm
156.8	2.72E-05	7.56E-06	core
155.8	4.60E+01	1.28E+01	core
155.1	8.26E+01	4.13E-01	perm
153.8	4.60E+01	1.28E+01	core
152.8	3.83E+01	1.06E+01	core
151.8	2.90E+01	8.05E+00	core
150.8	5.04E+01	1.40E+01	perm
149.8	1.31E+01	3.64E+00	cpt

Conductivity Data at RPC1CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
149	2.91E+01	8.08E+00	perm
148.1	6.28E+01	1.75E+01	perm
146.8	5.05E+01	1.40E+01	core
146	2.01E+01	5.59E+00	perm
144.8	2.90E+01	8.05E+00	core
143.8	4.78E+01	1.33E+01	perm
143.1	1.91E+01	5.31E+00	perm
141.8	3.20E+01	8.89E+00	perm
141.3	3.57E+01	9.92E+00	perm
140.3	4.71E+01	1.31E+01	perm
139	3.48E+01	9.67E+00	perm
138.3	3.99E+01	1.11E+01	perm
136.8	3.04E+01	8.43E+00	core
135.8	4.35E+01	1.21E+01	core
134.8	5.44E+01	1.51E+01	core
133.8	4.20E+01	1.17E+01	core
132.8	4.04E+01	1.12E+01	core
131.8	3.76E+01	1.04E+01	core
130.8	1.24E+01	3.44E+00	core
129.8	3.55E+01	9.87E+00	core
128.8	7.10E+00	1.97E+00	core
127.8	1.52E+01	4.21E+00	core
126.8	6.35E+00	1.76E+00	core
125.8	7.64E+00	2.12E+00	core
124.8	2.87E+01	7.97E+00	core
123.8	5.34E+01	1.48E+01	core
122.8	5.34E+01	1.48E+01	core
121.8	4.16E+01	1.16E+01	core
120.8	2.52E+01	7.01E+00	core
119.8	6.19E+01	1.72E+01	core
118.8	6.31E+01	1.75E+01	core
117.8	5.14E+01	1.43E+01	core
116.8	4.69E+01	1.30E+01	core
115.8	3.97E+01	1.10E+01	core
113.8	5.44E+01	1.51E+01	core
112.8	4.65E+01	1.29E+01	core
111.8	5.00E+01	1.39E+01	core
110.8	5.97E+01	1.66E+01	core
108.8	2.95E+01	8.20E+00	core
107.8	4.12E+01	1.14E+01	core
106.8	3.93E+01	1.09E+01	core
105.8	3.27E+01	9.08E+00	core
103.8	3.15E+01	8.75E+00	core
102.8	3.42E+01	9.51E+00	core
101.8	3.76E+01	1.04E+01	core
100.8	3.86E+01	1.07E+01	core
99.8	5.44E+01	1.51E+01	core
96.8	2.10E+01	5.82E+00	core

Conductivity Data at RPC1CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
94.8	5.08E+00	1.41E+00	core
93.8	5.00E+01	1.39E+01	core
92.3	1.43E-03	3.97E-04	perm

Conductivity Data at RPC2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
291.8	4.72E+00	1.31E+00	cpt
290.8	5.34E+00	1.48E+00	cpt
289.8	4.82E+00	1.34E+00	cpt
288.8	4.60E+00	1.28E+00	cpt
287.8	5.42E+00	1.51E+00	cpt
286.8	5.77E+00	1.60E+00	cpt
285.8	1.05E+01	2.93E+00	cpt
284.8	2.79E+00	7.74E-01	cpt
283.8	3.57E-02	9.92E-03	perm
282.8	4.04E-02	1.12E-02	cpt
281.8	2.04E-01	5.68E-02	cpt
280.8	6.96E-01	1.93E-01	cpt
279.8	7.27E+00	2.02E+00	cpt
278.3	3.69E-05	8.22E-05	perm
276.3	6.53E+00	1.81E+00	perm
274.6	3.64E+00	1.01E+00	perm
273.9	1.09E+01	3.02E+00	perm
273.1	1.17E+01	3.25E+00	perm
272.1	7.74E+00	2.15E+00	perm
271.3	6.14E+00	1.71E+00	perm
269.7	9.04E+00	2.51E+00	perm
268.8	7.24E+00	2.01E+00	core
267.8	1.15E+01	3.19E+00	core
266.8	1.81E+00	5.02E-01	core
265.8	1.14E+00	3.16E-01	core
264.8	1.81E+00	5.02E-01	core
263.8	1.43E-03	4.00E-04	cpt
262.8	1.14E+00	3.16E-01	core
261.8	1.81E+00	5.02E-01	core
260.8	1.14E+00	3.16E-01	core
259.8	6.40E-04	1.80E-04	cpt
258.8	5.50E-04	1.50E-04	cpt
257.3	1.47E-02	2.27E-03	perm
255.8	2.87E+00	7.97E-01	core
254.8	1.81E+00	5.02E-01	core
253.8	5.40E-04	1.50E-04	cpt
252.3	1.03E+01	1.03E-01	perm
250.8	6.20E-04	1.70E-04	cpt
249.8	7.60E-04	2.10E-04	cpt
248.3	8.10E+00	8.10E-02	perm
247.3	1.36E+01	1.36E-01	perm
246.3	5.21E+00	5.21E-02	perm
244.8	7.24E+00	2.01E+00	core
243.3	2.69E+01	2.69E-01	perm
242.0	1.96E+00	1.96E-02	perm
241.3	4.15E+00	4.15E-02	perm
239.8	5.65E+00	1.57E+00	cpt
238.8	6.13E-01	1.70E-01	cpt

Conductivity Data at RPC2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
237.8	7.24E+00	2.01E+00	core
236.8	1.15E+01	3.19E+00	core
235.3	3.79E+00	3.79E-02	perm
234.3	1.92E+00	1.92E-02	perm
232.9	2.78E+00	2.78E-02	perm
231.9	7.37E+00	7.37E-02	perm
230.3	3.78E+00	3.78E-02	perm
229.3	2.09E+01	2.09E-01	perm
228.3	8.88E+00	8.88E-02	perm
227.3	7.85E+00	7.85E-02	perm
226.3	4.66E+00	4.66E-02	perm
224.8	1.15E+01	3.19E+00	core
223.8	1.15E+01	3.19E+00	core
222.3	3.38E+00	3.38E-02	perm
220.3	4.28E+00	4.28E-02	perm
218.9	2.35E+00	2.35E-02	perm
217.3	7.42E+00	7.42E-02	perm
216.0	6.48E+00	6.48E-02	perm
215.0	3.77E+00	1.89E-02	perm
214.3	1.50E+01	7.49E-02	perm
213.3	1.73E+01	8.63E-02	perm
212.3	3.02E+01	1.51E-01	perm
211.3	2.58E+01	1.29E-01	perm
210.3	2.30E+01	1.15E-01	perm
209.3	1.36E+01	6.81E-02	perm
208.0	2.87E+01	1.43E-01	perm
207.0	3.10E+01	1.55E-01	perm
206.3	2.95E+01	1.47E-01	perm
205.3	1.03E+01	5.16E-02	perm
204.1	7.32E+00	3.66E-02	perm
202.8	1.00E-03	2.80E-04	cpt
201.8	1.33E-03	3.70E-04	cpt
200.8	1.76E+00	4.90E-01	cpt
199.8	4.82E+01	1.34E+01	cpt
198.8	6.97E+01	1.94E+01	cpt
197.8	5.82E+01	1.62E+01	cpt
196.8	5.11E+01	1.42E+01	cpt
195.8	3.12E+01	8.68E+00	cpt
194.8	1.30E+01	3.61E+00	cpt
193.8	1.34E+00	3.72E-01	cpt
192.8	4.40E-04	1.20E-04	cpt
191.8	1.84E+01	5.12E+00	cpt
190.8	2.61E-01	7.26E-02	cpt
189.8	1.32E+00	3.66E-01	cpt
188.8	3.70E-01	1.03E-01	cpt
187.8	2.53E-02	7.02E-03	cpt
186.8	3.43E-03	9.50E-04	cpt
185.8	3.83E-03	1.06E-03	cpt

Conductivity Data at RPC2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
184.8	1.61E-03	4.50E-04	cpt
183.8	4.26E-03	1.18E-03	cpt
182.8	5.46E-03	1.52E-03	cpt
181.8	1.49E-02	4.14E-03	cpt
180.8	4.43E-03	1.23E-03	cpt
179.8	7.96E-03	2.21E-03	cpt
178.8	1.23E+01	3.42E+00	cpt
177.9	6.15E+01	3.08E-01	perm
176.3	6.23E+01	3.11E-01	perm
175.3	4.56E+01	2.28E-01	perm
173.8	1.18E-03	3.30E-04	cpt
172.8	1.35E+01	6.76E-02	perm
172.3	4.16E+01	2.08E-01	perm
171.3	5.02E+01	2.51E-01	perm
170.3	4.82E+01	2.41E-01	perm
169.3	4.79E+01	2.40E-01	perm
168.3	5.74E+01	2.87E-01	perm
167.3	4.51E+01	2.25E-01	perm
166.3	6.57E+01	3.29E-01	perm
165.3	6.90E+01	3.45E-01	perm
164.3	6.03E+01	3.01E-01	perm
162.7	3.02E+01	1.51E-01	perm
162.3	1.38E+01	6.91E-02	perm
161.3	3.22E+01	1.61E-01	perm
159.8	2.89E+01	8.04E+00	core
158.3	4.65E+01	2.33E-01	perm
157.3	5.30E+01	2.65E-01	perm
156.3	5.70E+01	2.85E-01	perm
155.3	4.82E+01	2.41E-01	perm
154.3	5.23E+01	2.62E-01	perm
153.0	5.79E+01	2.89E-01	perm
152.3	5.79E+01	2.89E-01	perm
150.8	4.69E+01	1.30E+01	cpt
149.8	5.83E+01	1.62E+01	cpt
148.8	6.12E+01	1.70E+01	cpt
147.3	5.08E+01	1.41E+01	perm
146.3	6.53E+01	1.81E+01	perm
145.3	5.74E+01	1.59E+01	perm
144.3	5.83E+01	1.62E+01	perm
143.1	5.36E+01	1.49E+01	perm
142.3	5.49E+01	1.53E+01	perm
141.3	5.07E+01	1.41E+01	perm
140.3	5.27E+01	1.46E+01	perm
139.3	6.59E+01	1.83E+01	perm
138.0	1.05E+02	2.90E+01	perm
137.3	8.18E+01	2.27E+01	perm
136.3	1.04E+02	2.89E+01	perm
133.3	8.30E+01	2.31E+01	perm

Conductivity Data at RPC2CL

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
132.3	7.80E+01	2.17E+01	perm
131.3	7.95E+01	2.21E+01	perm
130.0	7.84E+01	2.18E+01	perm
129.3	5.47E+01	1.52E+01	perm
128.3	8.39E+01	2.33E+01	perm
127.3	5.86E+01	1.63E+01	perm
126.3	5.25E+01	1.46E+01	perm
125.3	3.13E+01	8.68E+00	perm
123.8	7.23E+00	2.01E+00	core
122.8	2.04E+01	5.65E+00	perm
121.3	2.21E+01	6.14E+00	perm
120.3	3.31E+01	9.18E+00	perm
118.3	2.70E+01	7.51E+00	perm
117.3	2.78E+01	7.73E+00	perm
115.8	1.72E+01	4.77E+00	perm
115.3	2.25E+01	6.26E+00	perm
113.3	4.78E+01	1.33E+01	perm
112.3	3.88E+01	1.08E+01	perm
103.3	1.77E+01	4.91E+00	perm
102.3	2.48E+01	6.88E+00	perm
100.8	1.91E+01	5.31E+00	core
99.8	4.20E+01	1.17E+01	core
98.8	3.49E+01	9.69E+00	core
97.8	3.79E+01	1.05E+01	core
96.8	1.49E+01	4.13E+00	core
95.8	1.82E+01	5.07E+00	core
94.8	4.15E+00	1.15E+00	core
93.8	1.10E+01	3.05E+00	core
92.8	4.55E+00	1.26E+00	core
91.8	2.57E-05	7.14E-06	core
90.8	2.57E-05	7.14E-06	core

Conductivity Data at RPT1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
289.8	3.28E+00	9.12E-01	cpt
288.8	3.29E+00	9.14E-01	cpt
287.8	3.39E+00	9.41E-01	cpt
286.8	3.47E+00	9.64E-01	cpt
285.8	3.50E+00	9.73E-01	cpt
284.8	3.49E+00	9.69E-01	cpt
283.8	3.97E+00	1.10E+00	cpt
282.8	7.39E+00	2.05E+00	cpt
281.8	9.59E+00	2.66E+00	cpt
280.8	1.69E+01	4.68E+00	cpt
279.8	2.88E+01	7.99E+00	cpt
278.8	4.99E+01	1.39E+01	cpt
277.8	4.67E+01	1.30E+01	cpt
276.8	1.20E-01	3.34E-02	cpt
275.8	1.04E-03	2.90E-04	cpt
274.8	2.01E-01	5.58E-02	cpt
273.8	7.22E-01	2.00E-01	cpt
272.8	2.94E+00	8.16E-01	cpt
271.8	1.38E-03	3.80E-04	cpt
270.8	3.82E+01	1.06E+01	cpt
269.8	4.98E+01	1.38E+01	cpt
268.8	3.58E+00	9.94E-01	cpt
267.8	1.23E-01	3.41E-02	cpt
266.8	3.03E-01	8.41E-02	cpt
265.8	8.23E-01	2.29E-01	cpt
264.8	5.50E-03	1.53E-03	cpt
263.8	1.48E-03	4.10E-04	cpt
262.8	7.80E-04	2.20E-04	cpt
261.8	1.06E+01	2.94E+00	cpt
260.8	1.15E-03	3.20E-04	cpt
259.8	7.00E-04	1.90E-04	cpt
258.8	1.87E-03	5.20E-04	cpt
257.8	3.28E-03	9.10E-04	cpt
256.8	6.80E-04	1.90E-04	cpt
255.8	5.90E-04	1.60E-04	cpt
254.8	5.90E-04	1.60E-04	cpt
253.8	6.20E-04	1.70E-04	cpt
252.8	5.90E-04	1.60E-04	cpt
251.8	5.70E-04	1.60E-04	cpt
250.8	5.90E-04	1.70E-04	cpt
249.8	7.70E+00	2.14E+00	cpt
248.8	3.30E+00	9.16E-01	cpt
247.8	6.23E+00	1.73E+00	cpt
246.8	7.56E+00	2.10E+00	cpt
245.8	5.38E+00	1.50E+00	cpt
244.8	7.22E+00	2.00E+00	cpt
243.8	5.84E+00	1.62E+00	cpt
242.8	1.52E+01	4.21E+00	cpt

Conductivity Data at RPT1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
241.8	9.89E+00	2.75E+00	cpt
240.8	6.69E+00	1.86E+00	cpt
239.8	6.69E+00	1.86E+00	cpt
238.8	6.36E+00	1.77E+00	cpt
237.8	2.48E-01	6.89E-02	cpt
236.8	8.98E+00	2.49E+00	cpt
235.8	1.01E+01	2.81E+00	cpt
234.8	1.17E+01	3.25E+00	cpt
233.8	1.31E+01	3.64E+00	cpt
232.8	1.86E+01	5.17E+00	cpt
231.8	1.38E+01	3.85E+00	cpt
230.8	8.93E+00	2.48E+00	cpt
229.8	2.00E+00	5.55E-01	cpt
228.8	2.38E-01	6.60E-02	cpt
227.8	5.05E+00	1.40E+00	cpt
226.8	7.14E+00	1.98E+00	cpt
225.8	7.60E+00	2.11E+00	cpt
224.8	7.99E+00	2.22E+00	cpt
223.8	9.29E+00	2.58E+00	cpt
222.8	1.30E+00	3.60E-01	cpt
221.8	1.26E-01	3.49E-02	cpt
220.8	1.85E-01	5.13E-02	cpt
219.8	4.95E+01	1.38E+01	cpt
218.8	1.18E+00	3.27E-01	cpt
217.8	4.97E-01	1.38E-01	cpt
216.8	3.32E-01	9.22E-02	cpt
215.8	2.14E+00	5.95E-01	cpt
214.8	2.16E-01	5.99E-02	cpt
213.8	1.02E-03	2.80E-04	cpt
212.8	4.33E-01	1.20E-01	cpt
211.8	1.66E+01	4.61E+00	cpt
210.8	1.66E+01	4.61E+00	cpt
209.8	1.69E+01	4.68E+00	cpt
208.8	1.90E+01	5.28E+00	cpt
207.8	2.00E+01	5.57E+00	cpt
206.8	1.98E+01	5.50E+00	cpt
205.8	2.14E+01	5.94E+00	cpt
204.8	2.43E+01	6.76E+00	cpt
203.8	2.65E+01	7.37E+00	cpt
202.8	3.02E+01	8.39E+00	cpt
201.8	3.58E+01	9.94E+00	cpt
200.8	3.45E+01	9.57E+00	cpt
199.8	2.97E-01	8.26E-02	cpt
198.8	6.88E-02	1.91E-02	cpt
197.8	2.63E+01	7.30E+00	cpt
196.8	2.45E+01	6.81E+00	cpt
195.8	9.51E+01	2.64E+01	cpt
194.8	8.49E+01	2.36E+01	cpt

Conductivity Data at RPT1

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
193.8	3.17E+01	8.80E+00	cpt
192.8	1.81E+01	5.04E+00	cpt
191.8	1.84E+01	5.12E+00	cpt
190.8	2.15E+01	5.96E+00	cpt
189.8	1.83E+01	5.08E+00	cpt
188.8	2.64E+01	7.34E+00	cpt
187.8	1.59E+01	4.41E+00	cpt
186.8	1.27E+01	3.53E+00	cpt
185.8	1.01E+01	2.81E+00	cpt
184.8	9.75E+00	2.71E+00	cpt
183.8	3.88E-02	1.08E-02	cpt
182.8	1.15E+01	3.20E+00	cpt
181.8	1.19E+01	3.29E+00	cpt
180.8	1.18E+01	3.28E+00	cpt
179.8	7.03E+00	1.95E+00	cpt
178.8	1.30E+00	3.62E-01	cpt
177.8	4.02E-03	1.12E-03	cpt
176.8	4.01E-03	1.11E-03	cpt
175.8	8.44E-02	2.35E-02	cpt
174.8	3.96E-03	1.10E-03	cpt
173.8	3.01E-03	8.40E-04	cpt
172.8	3.17E-03	8.80E-04	cpt
171.8	1.91E-03	5.30E-04	cpt
170.8	1.25E-03	3.50E-04	cpt
169.8	8.90E-04	2.50E-04	cpt
168.8	1.96E-03	5.40E-04	cpt
167.8	5.29E+00	1.47E+00	cpt
166.8	4.72E+01	1.31E+01	cpt

Conductivity Data at RPT2

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
283.8	3.56E+00	9.89E-01	cpt
282.8	3.32E+00	9.23E-01	cpt
281.8	2.25E-01	6.24E-02	cpt
280.8	1.92E-01	5.35E-02	cpt
279.8	3.48E+00	9.66E-01	cpt
278.8	3.48E+00	9.68E-01	cpt
277.8	4.93E+00	1.37E+00	cpt
276.8	4.73E+00	1.31E+00	cpt
275.8	5.43E+00	1.51E+00	cpt
274.8	5.43E+00	1.51E+00	cpt
273.8	6.27E+00	1.74E+00	cpt
272.8	5.69E+00	1.58E+00	cpt
271.8	7.71E+00	2.14E+00	cpt
270.8	6.22E+00	1.73E+00	cpt
269.8	4.54E+00	1.26E+00	cpt
268.8	6.52E+00	1.81E+00	cpt
267.8	7.15E+00	1.99E+00	cpt
266.8	1.66E+01	4.60E+00	cpt
265.8	4.76E+00	1.32E+00	cpt
264.8	8.97E+00	2.49E+00	cpt
263.8	4.94E+00	1.37E+00	cpt
262.8	4.15E+00	1.15E+00	cpt
261.8	6.05E+00	1.68E+00	cpt
260.8	1.65E+01	4.59E+00	cpt
259.8	3.70E+01	1.03E+01	cpt
258.8	5.18E+01	1.44E+01	cpt
257.8	2.96E+01	8.23E+00	cpt
256.8	3.12E+01	8.66E+00	cpt
255.8	2.87E+01	7.98E+00	cpt
254.8	2.33E+01	6.48E+00	cpt
253.8	2.76E+01	7.66E+00	cpt
252.8	2.40E+01	6.68E+00	cpt
251.8	2.10E+01	5.84E+00	cpt
250.8	1.69E+01	4.70E+00	cpt
249.8	3.08E+01	8.55E+00	cpt
248.8	3.03E+01	8.42E+00	cpt
247.8	2.86E+01	7.93E+00	cpt
246.8	2.50E+01	6.94E+00	cpt
245.8	1.31E+01	3.64E+00	cpt
244.8	5.86E+00	1.63E+00	cpt
243.8	7.42E+00	2.06E+00	cpt
242.8	8.06E+00	2.24E+00	cpt
241.8	7.49E+00	2.08E+00	cpt
240.8	7.01E+00	1.95E+00	cpt
239.8	2.03E-02	5.64E-03	cpt
238.8	3.02E+00	8.40E-01	cpt
237.8	2.34E-01	6.51E-02	cpt
236.8	1.54E+00	4.27E-01	cpt

Conductivity Data at RPT2

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
235.8	7.19E+00	2.00E+00	cpt
234.8	8.93E+00	2.48E+00	cpt
233.8	6.97E+00	1.94E+00	cpt
232.8	2.28E+00	6.34E-01	cpt
231.8	8.89E+00	2.47E+00	cpt
230.8	3.54E+00	9.84E-01	cpt
229.8	1.91E-01	5.30E-02	cpt
228.8	8.90E-04	2.50E-04	cpt
227.8	1.94E-03	5.40E-04	cpt
226.8	1.27E-03	3.50E-04	cpt
225.8	2.15E-02	5.97E-03	cpt
224.8	4.98E-03	1.38E-03	cpt
223.8	9.61E-01	2.67E-01	cpt
222.8	8.80E-04	2.40E-04	cpt
221.8	5.44E-03	1.51E-03	cpt
220.8	1.68E-01	4.68E-02	cpt
219.8	5.98E-02	1.66E-02	cpt
218.8	1.14E+01	3.18E+00	cpt
217.8	1.52E+01	4.22E+00	cpt
216.8	1.59E+01	4.42E+00	cpt
215.8	1.84E+01	5.10E+00	cpt
214.8	4.36E+00	1.21E+00	cpt
213.8	1.59E+01	4.42E+00	cpt
212.8	1.26E+01	3.49E+00	cpt
211.8	7.19E+00	2.00E+00	cpt
210.8	1.30E+01	3.61E+00	cpt
209.8	8.95E+00	2.49E+00	cpt
208.8	1.87E+01	5.20E+00	cpt
207.8	1.73E+01	4.79E+00	cpt
206.8	4.18E-03	1.16E-03	cpt
205.8	3.10E-03	8.60E-04	cpt
204.8	9.84E+00	2.73E+00	cpt
203.8	4.48E+01	1.24E+01	cpt
202.8	6.08E+01	1.69E+01	cpt
201.8	5.14E+01	1.43E+01	cpt
200.8	3.97E+01	1.10E+01	cpt
199.8	3.16E+01	8.79E+00	cpt
198.8	5.52E+01	1.53E+01	cpt
197.8	6.86E+01	1.91E+01	cpt
196.8	6.19E+01	1.72E+01	cpt
195.8	5.00E+01	1.39E+01	cpt
194.8	1.73E+01	4.82E+00	cpt
193.8	1.80E+01	4.99E+00	cpt
192.8	1.19E-02	3.32E-03	cpt
191.8	2.83E-03	7.90E-04	cpt
190.8	2.24E-03	6.20E-04	cpt
189.8	2.50E-03	7.00E-04	cpt
188.8	7.45E-03	2.07E-03	cpt

Conductivity Data at RPT2

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
187.8	2.69E-03	7.50E-04	cpt
186.8	2.82E-03	7.80E-04	cpt
185.8	6.20E-03	1.72E-03	cpt
184.8	2.31E-03	6.40E-04	cpt
183.8	2.46E-03	6.80E-04	cpt
182.8	1.04E-03	2.90E-04	cpt
181.8	1.06E-03	3.00E-04	cpt
180.8	2.94E-03	8.20E-04	cpt
179.8	2.78E-03	7.70E-04	cpt
178.8	2.35E-03	6.50E-04	cpt
177.8	3.07E-03	8.50E-04	cpt
176.8	3.38E-03	9.40E-04	cpt
175.8	1.11E-02	3.09E-03	cpt
174.8	4.22E-03	1.17E-03	cpt
173.8	2.28E-03	6.30E-04	cpt
172.8	1.17E-03	3.20E-04	cpt
171.8	1.22E-03	3.40E-04	cpt
170.8	1.19E-03	3.30E-04	cpt
169.8	1.20E-03	3.30E-04	cpt
168.8	1.98E-03	5.50E-04	cpt
167.8	2.82E-03	7.80E-04	cpt
166.8	1.01E-02	2.80E-03	cpt
165.8	1.25E-03	3.50E-04	cpt
164.8	1.20E-02	3.34E-03	cpt
163.8	1.42E+01	3.94E+00	cpt
162.8	3.62E+01	1.01E+01	cpt
161.8	6.01E+01	1.67E+01	cpt
160.8	1.00E+02	2.78E+01	cpt
159.8	1.00E+02	2.78E+01	cpt
158.8	9.01E+01	2.50E+01	cpt
157.8	1.00E+02	2.78E+01	cpt
156.8	1.00E+02	2.78E+01	cpt
155.8	1.00E+02	2.78E+01	cpt
154.8	4.38E+01	1.22E+01	cpt
153.8	6.50E+01	1.81E+01	cpt
152.8	5.13E+01	1.43E+01	cpt
151.8	3.99E+01	1.11E+01	cpt
150.8	1.10E+01	3.05E+00	cpt
149.8	1.59E+01	4.41E+00	cpt
148.8	3.23E+01	8.96E+00	cpt
147.8	3.21E+01	8.90E+00	cpt
146.8	1.00E+02	2.78E+01	cpt
145.8	2.76E+01	7.66E+00	cpt
144.8	1.00E+02	2.78E+01	cpt

Conductivity Data at RPT3

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
297.8	1.22E-02	3.38E-03	cpt
296.8	2.70E-04	7.00E-05	cpt
295.8	4.38E+00	1.22E+00	cpt
294.8	3.94E+00	1.10E+00	cpt
293.8	3.91E+00	1.09E+00	cpt
292.8	3.93E+00	1.09E+00	cpt
291.8	5.39E+00	1.50E+00	cpt
290.8	3.07E+00	8.53E-01	cpt
289.8	4.05E+00	1.13E+00	cpt
288.8	3.73E+00	1.04E+00	cpt
287.8	5.39E+00	1.50E+00	cpt
286.8	2.05E-03	5.70E-04	cpt
285.8	7.47E+00	2.08E+00	cpt
284.8	1.51E+01	4.20E+00	cpt
283.8	3.91E+00	1.09E+00	cpt
282.8	1.48E-03	4.10E-04	cpt
281.8	1.11E-03	3.10E-04	cpt
280.8	1.57E+01	4.37E+00	cpt
279.8	1.21E-03	3.30E-04	cpt
278.8	8.80E-04	2.50E-04	cpt
277.8	9.50E-04	2.60E-04	cpt
276.8	7.68E+00	2.13E+00	cpt
275.8	4.06E-02	1.13E-02	cpt
274.8	6.63E+00	1.84E+00	cpt
273.8	7.74E+00	2.15E+00	cpt
272.8	1.40E+00	3.90E-01	cpt
271.8	1.92E-02	5.34E-03	cpt
270.8	4.24E+00	1.18E+00	cpt
269.8	1.08E-03	3.00E-04	cpt
268.8	6.80E-04	1.90E-04	cpt
267.8	8.78E-03	2.44E-03	cpt
266.8	6.10E-04	1.70E-04	cpt
265.8	5.70E-04	1.60E-04	cpt
264.8	7.10E-04	2.00E-04	cpt
263.8	6.60E-04	1.80E-04	cpt
262.8	6.20E-04	1.70E-04	cpt
261.8	1.36E-03	3.80E-04	cpt
260.8	6.10E-04	1.70E-04	cpt
259.8	4.90E-04	1.40E-04	cpt
258.8	5.40E-04	1.50E-04	cpt
257.8	5.00E-04	1.40E-04	cpt
256.8	4.70E-04	1.30E-04	cpt
255.8	4.60E-04	1.30E-04	cpt
254.8	4.40E-04	1.20E-04	cpt
253.8	4.30E-04	1.20E-04	cpt
252.8	4.40E-04	1.20E-04	cpt
251.8	4.10E-04	1.10E-04	cpt
250.8	4.70E-03	1.31E-03	cpt

Conductivity Data at RPT3

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
249.8	1.07E-02	2.97E-03	cpt
248.8	6.93E-03	1.93E-03	cpt
247.8	2.52E-03	7.00E-04	cpt
246.8	4.20E-04	1.20E-04	cpt
245.8	4.40E-04	1.20E-04	cpt
244.8	1.92E+01	5.35E+00	cpt
243.8	1.54E+01	4.27E+00	cpt
242.8	6.49E+00	1.80E+00	cpt
241.8	6.14E+00	1.71E+00	cpt
240.8	7.80E-02	2.17E-02	cpt
239.8	1.44E+01	4.01E+00	cpt
238.8	1.11E+01	3.07E+00	cpt
237.8	3.13E-01	8.69E-02	cpt
236.8	1.05E-01	2.90E-02	cpt
235.8	8.76E+00	2.43E+00	cpt
234.8	2.97E+00	8.25E-01	cpt
233.8	4.44E+00	1.23E+00	cpt
232.8	1.01E+00	2.80E-01	cpt
231.8	8.73E+00	2.43E+00	cpt
230.8	2.24E+01	6.23E+00	cpt
229.8	1.18E+01	3.28E+00	cpt
228.8	9.17E+00	2.55E+00	cpt
227.8	3.71E-02	1.03E-02	cpt
226.8	2.28E-01	6.34E-02	cpt
225.8	9.66E+00	2.68E+00	cpt
224.8	7.55E+00	2.10E+00	cpt
223.8	8.12E+00	2.25E+00	cpt
222.8	6.81E+00	1.89E+00	cpt
221.8	1.40E+00	3.88E-01	cpt
220.8	1.36E-03	3.80E-04	cpt
219.8	3.32E-01	9.23E-02	cpt
218.8	8.73E-02	2.43E-02	cpt
217.8	6.70E-04	1.90E-04	cpt
216.8	1.14E+01	3.17E+00	cpt
215.8	1.52E+00	4.22E-01	cpt
214.8	8.08E-03	2.24E-03	cpt
213.8	6.81E-01	1.89E-01	cpt
212.8	6.24E-03	1.73E-03	cpt
211.8	2.54E-02	7.07E-03	cpt
210.8	4.04E-01	1.12E-01	cpt
209.8	1.01E-01	2.81E-02	cpt
208.8	7.14E-02	1.98E-02	cpt
207.8	1.16E+00	3.23E-01	cpt
206.8	7.66E+00	2.13E+00	cpt
205.8	6.61E+00	1.84E+00	cpt
204.8	6.66E+00	1.85E+00	cpt
203.8	6.21E-01	1.73E-01	cpt
202.8	7.60E-04	2.10E-04	cpt

Conductivity Data at RPT3

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
201.8	1.75E+01	4.87E+00	cpt
200.8	1.76E+01	4.89E+00	cpt
199.8	1.93E+01	5.37E+00	cpt
198.8	1.81E+01	5.02E+00	cpt
197.8	2.14E+01	5.94E+00	cpt
196.8	1.92E+01	5.32E+00	cpt
195.8	1.64E+01	4.56E+00	cpt
194.8	1.96E+01	5.46E+00	cpt
193.8	2.29E+01	6.37E+00	cpt
192.8	2.62E+01	7.27E+00	cpt
191.8	2.75E+01	7.63E+00	cpt
190.8	2.83E+01	7.87E+00	cpt
189.8	1.52E-03	4.20E-04	cpt
188.8	1.26E-03	3.50E-04	cpt
187.8	3.09E+01	8.59E+00	cpt
186.8	6.63E+01	1.84E+01	cpt
185.8	5.18E+01	1.44E+01	cpt
184.8	4.76E+01	1.32E+01	cpt
183.8	4.72E+01	1.31E+01	cpt
182.8	7.29E+01	2.02E+01	cpt
181.8	7.99E+01	2.22E+01	cpt
180.8	8.10E+01	2.25E+01	cpt
179.8	7.52E+01	2.09E+01	cpt
178.8	4.69E+01	1.30E+01	cpt
177.8	4.31E+01	1.20E+01	cpt
176.8	1.30E-03	3.60E-04	cpt
175.8	5.00E-04	1.40E-04	cpt
174.8	3.78E+01	1.05E+01	cpt
173.8	4.62E+01	1.28E+01	cpt
172.8	3.84E+01	1.07E+01	cpt
171.8	5.03E+01	1.40E+01	cpt
170.8	2.71E+01	7.53E+00	cpt
169.8	5.37E+01	1.49E+01	cpt
168.8	7.60E+01	2.11E+01	cpt
167.8	3.05E+01	8.48E+00	cpt
166.8	9.59E-03	2.67E-03	cpt
165.8	1.84E-03	5.10E-04	cpt
164.8	7.62E+01	2.12E+01	cpt
163.8	7.25E+01	2.01E+01	cpt
162.8	6.22E+01	1.73E+01	cpt
161.8	7.04E+01	1.96E+01	cpt
160.8	7.48E+01	2.08E+01	cpt
159.8	5.61E+01	1.56E+01	cpt
158.8	3.30E-03	9.20E-04	cpt
157.8	1.28E-02	3.55E-03	cpt
156.8	1.74E-03	4.80E-04	cpt
155.8	6.47E+01	1.80E+01	cpt
154.8	9.57E+01	2.66E+01	cpt

Conductivity Data at RPT3

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
153.8	1.00E+02	2.78E+01	cpt
152.8	5.32E+01	1.48E+01	cpt
151.8	1.00E+02	2.78E+01	cpt
150.8	7.30E+01	2.03E+01	cpt
149.8	1.00E+02	2.78E+01	cpt
148.8	1.00E+02	2.78E+01	cpt
147.8	6.29E+01	1.75E+01	cpt
146.8	1.00E+02	2.78E+01	cpt
145.8	6.17E+01	1.71E+01	cpt
144.8	1.76E-01	4.89E-02	cpt
143.8	9.98E+01	2.77E+01	cpt
142.8	1.00E+02	2.78E+01	cpt
141.8	1.00E+02	2.78E+01	cpt
140.8	4.23E+01	1.18E+01	cpt
139.8	7.59E+01	2.11E+01	cpt
138.8	6.77E+01	1.88E+01	cpt
137.8	4.54E+01	1.26E+01	cpt
136.8	2.64E+00	7.33E-01	cpt
135.8	1.00E+02	2.78E+01	cpt

Conductivity Data at RPT5

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
294.0	4.31E+00	1.20E+00	cpt
293.0	5.63E+00	1.56E+00	cpt
292.0	4.95E+00	1.37E+00	cpt
291.0	4.25E+00	1.18E+00	cpt
290.0	4.55E+00	1.27E+00	cpt
289.0	5.74E+00	1.59E+00	cpt
288.0	1.65E+00	4.59E-01	cpt
287.0	4.63E-02	1.29E-02	cpt
286.0	3.83E-03	1.06E-03	cpt
285.0	1.58E-03	4.40E-04	cpt
284.0	1.57E-03	4.40E-04	cpt
283.0	5.63E-03	1.56E-03	cpt
282.0	1.16E+00	3.23E-01	cpt
281.0	7.24E-03	2.01E-03	cpt
280.0	1.71E-03	4.80E-04	cpt
279.0	1.48E+01	4.11E+00	cpt
278.0	8.42E+01	2.34E+01	cpt
277.0	2.90E-03	8.00E-04	cpt
276.0	1.52E-03	4.20E-04	cpt
275.0	1.71E-03	4.70E-04	cpt
274.0	1.34E-03	3.70E-04	cpt
273.0	1.93E-01	5.36E-02	cpt
272.0	1.26E-03	3.50E-04	cpt
271.0	6.02E+00	1.67E+00	cpt
270.0	1.73E+01	4.80E+00	cpt
269.0	1.20E+01	3.34E+00	cpt
268.0	5.79E+00	1.61E+00	cpt
267.0	8.07E+00	2.24E+00	cpt
266.0	9.52E+00	2.64E+00	cpt
265.0	5.51E+00	1.53E+00	cpt
264.0	6.28E+00	1.74E+00	cpt
263.0	1.07E+01	2.97E+00	cpt
262.0	6.82E+00	1.90E+00	cpt
261.0	5.00E-04	1.40E-04	cpt
260.0	4.60E-04	1.30E-04	cpt
259.0	4.50E-04	1.20E-04	cpt
258.0	4.30E-04	1.20E-04	cpt
257.0	4.20E-04	1.20E-04	cpt
256.0	4.60E-04	1.30E-04	cpt
255.0	4.75E+00	1.32E+00	cpt
254.0	8.60E-01	2.39E-01	cpt
253.0	5.10E-04	1.40E-04	cpt
252.0	7.80E-04	2.20E-04	cpt
251.0	5.10E-04	1.40E-04	cpt
250.0	9.80E-04	2.70E-04	cpt
249.0	5.10E-04	1.40E-04	cpt
248.0	5.00E-04	1.40E-04	cpt
247.0	5.20E-04	1.40E-04	cpt

Conductivity Data at RPT5

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
246.0	4.90E-04	1.40E-04	cpt
245.0	4.90E-04	1.40E-04	cpt
244.0	5.00E-04	1.40E-04	cpt
243.0	5.00E-04	1.40E-04	cpt
242.0	4.80E-04	1.30E-04	cpt
241.0	4.80E-04	1.30E-04	cpt
240.0	4.90E-04	1.40E-04	cpt
239.0	5.10E-04	1.40E-04	cpt
238.0	5.00E-04	1.40E-04	cpt
237.0	5.10E-04	1.40E-04	cpt
236.0	5.50E-04	1.50E-04	cpt
235.0	5.00E-04	1.40E-04	cpt
234.0	1.69E-01	4.68E-02	cpt
233.0	2.66E+00	7.39E-01	cpt
232.0	1.26E+01	3.50E+00	cpt
231.0	7.74E+00	2.15E+00	cpt
230.0	3.40E+00	9.44E-01	cpt
229.0	8.62E+00	2.40E+00	cpt
228.0	8.97E-01	2.49E-01	cpt
227.0	1.46E+00	4.04E-01	cpt
226.0	5.31E+00	1.47E+00	cpt
225.0	9.77E+00	2.71E+00	cpt
224.0	1.44E+01	4.01E+00	cpt
223.0	1.05E+01	2.90E+00	cpt
222.0	1.31E+00	3.63E-01	cpt
221.0	6.90E-04	1.90E-04	cpt
220.0	7.57E+00	2.10E+00	cpt
219.0	8.24E+00	2.29E+00	cpt
218.0	7.35E+00	2.04E+00	cpt
217.0	7.68E+00	2.13E+00	cpt
216.0	7.50E+00	2.08E+00	cpt
215.0	1.01E-03	2.80E-04	cpt
214.0	1.05E-03	2.90E-04	cpt
213.0	8.81E-03	2.45E-03	cpt
212.0	1.19E+01	3.29E+00	cpt
211.0	1.07E+01	2.97E+00	cpt
210.0	7.36E+00	2.04E+00	cpt
209.0	1.29E+01	3.59E+00	cpt
208.0	1.47E+01	4.07E+00	cpt
207.0	1.51E+01	4.20E+00	cpt
206.0	9.72E+00	2.70E+00	cpt
205.0	1.98E+00	5.51E-01	cpt
204.0	1.60E-03	4.50E-04	cpt
203.0	1.99E-01	5.52E-02	cpt
202.0	2.67E+01	7.41E+00	cpt
201.0	2.84E+01	7.89E+00	cpt
200.0	4.34E+01	1.20E+01	cpt
199.0	5.24E+01	1.46E+01	cpt

Conductivity Data at RPT5

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
198.0	4.84E+01	1.35E+01	cpt
197.0	3.52E+01	9.78E+00	cpt
196.0	3.81E+01	1.06E+01	cpt
195.0	3.84E+01	1.07E+01	cpt
194.0	4.38E+01	1.22E+01	cpt
193.0	4.37E+01	1.21E+01	cpt
192.0	1.42E-01	3.94E-02	cpt
191.0	1.80E-03	5.00E-04	cpt
190.0	3.43E-03	9.50E-04	cpt
189.0	8.17E-02	2.27E-02	cpt
188.0	2.86E+01	7.94E+00	cpt
187.0	3.14E+01	8.71E+00	cpt
186.0	1.61E-03	4.50E-04	cpt
185.0	5.98E+01	1.66E+01	cpt
184.0	1.00E+02	2.78E+01	cpt
183.0	1.00E+02	2.78E+01	cpt
182.0	1.00E+02	2.78E+01	cpt
181.0	6.95E+01	1.93E+01	cpt
180.0	4.26E+01	1.18E+01	cpt
179.0	2.61E+01	7.24E+00	cpt
178.0	2.65E+01	7.36E+00	cpt
177.0	3.01E+01	8.35E+00	cpt
176.0	2.66E+01	7.39E+00	cpt
175.0	5.61E+01	1.56E+01	cpt
174.0	5.28E-01	1.47E-01	cpt
173.0	8.10E-04	2.30E-04	cpt
172.0	7.40E-04	2.10E-04	cpt
171.0	7.60E-04	2.10E-04	cpt
170.0	6.44E-02	1.79E-02	cpt
169.0	4.69E+01	1.30E+01	cpt
168.0	4.38E+01	1.22E+01	cpt
167.0	4.78E+01	1.33E+01	cpt
166.0	1.00E+02	2.78E+01	cpt
165.0	1.00E+02	2.78E+01	cpt
164.0	8.71E-02	2.42E-02	cpt
163.0	6.00E-04	1.70E-04	cpt
162.0	1.15E-03	3.20E-04	cpt
161.0	2.14E-02	5.94E-03	cpt
160.0	7.94E+01	2.21E+01	cpt
159.0	5.67E+01	1.57E+01	cpt
158.0	6.66E+01	1.85E+01	cpt
157.0	7.73E-03	2.15E-03	cpt
156.0	6.89E-03	1.91E-03	cpt
155.0	1.23E-03	3.40E-04	cpt
154.0	8.30E-04	2.30E-04	cpt
153.0	9.00E-04	2.50E-04	cpt
152.0	8.60E-04	2.40E-04	cpt
151.0	3.57E-01	9.92E-02	cpt

Conductivity Data at RPT5

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
150.0	7.45E-03	2.07E-03	cpt
149.0	6.69E+01	1.86E+01	cpt
148.0	3.35E+01	9.31E+00	cpt
147.0	4.34E+00	1.20E+00	cpt
146.0	1.15E+01	3.18E+00	cpt
145.0	1.37E+00	3.80E-01	cpt
144.0	4.72E-03	1.31E-03	cpt
143.0	5.52E+00	1.53E+00	cpt
142.0	1.00E+02	2.78E+01	cpt
141.0	4.33E+01	1.20E+01	cpt
140.0	3.58E+01	9.94E+00	cpt
139.0	3.34E+01	9.28E+00	cpt
138.0	6.17E+01	1.71E+01	cpt
137.0	1.00E+02	2.78E+01	cpt
136.0	1.00E+02	2.78E+01	cpt
135.0	1.00E+02	2.78E+01	cpt
134.0	1.00E+02	2.78E+01	cpt
133.0	1.00E+02	2.78E+01	cpt

Conductivity Data at RPT6

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
297.4	3.59E+00	9.96E-01	cpt
296.4	4.12E+00	1.14E+00	cpt
295.4	4.00E+00	1.11E+00	cpt
294.4	4.49E+00	1.25E+00	cpt
293.4	5.71E+00	1.59E+00	cpt
292.4	7.16E-03	1.99E-03	cpt
291.4	1.76E-03	4.90E-04	cpt
290.4	1.80E-03	5.00E-04	cpt
289.4	1.90E-03	5.30E-04	cpt
288.4	3.05E-03	8.50E-04	cpt
287.4	2.98E-03	8.30E-04	cpt
286.4	1.17E-02	3.26E-03	cpt
285.4	3.17E-03	8.80E-04	cpt
284.4	2.79E-03	7.80E-04	cpt
283.4	2.54E-03	7.10E-04	cpt
282.4	1.99E-03	5.50E-04	cpt
281.4	1.89E-03	5.30E-04	cpt
280.4	1.50E-03	4.20E-04	cpt
279.4	1.95E-03	5.40E-04	cpt
278.4	1.66E-03	4.60E-04	cpt
277.4	2.24E-03	6.20E-04	cpt
276.4	2.82E-03	7.80E-04	cpt
275.4	2.85E-03	7.90E-04	cpt
274.4	7.15E-02	1.99E-02	cpt
273.4	1.94E-01	5.38E-02	cpt
272.4	6.30E+00	1.75E+00	cpt
271.4	6.26E+00	1.74E+00	cpt
270.4	1.74E+00	4.84E-01	cpt
269.4	5.71E+00	1.59E+00	cpt
268.4	5.41E+00	1.50E+00	cpt
267.4	6.03E+00	1.67E+00	cpt
266.4	5.76E+00	1.60E+00	cpt
265.4	5.11E+00	1.42E+00	cpt
264.4	6.85E+00	1.90E+00	cpt
263.4	6.65E+00	1.85E+00	cpt
262.4	8.67E+00	2.41E+00	cpt
261.4	1.52E+01	4.21E+00	cpt
260.4	1.69E+01	4.70E+00	cpt
259.4	1.25E+01	3.48E+00	cpt
258.4	1.29E+01	3.59E+00	cpt
257.4	3.31E-02	9.20E-03	cpt
256.4	4.29E-01	1.19E-01	cpt
255.4	6.43E+00	1.79E+00	cpt
254.4	7.37E+00	2.05E+00	cpt
253.4	6.42E+00	1.78E+00	cpt
252.4	6.40E-04	1.80E-04	cpt
251.4	6.98E+00	1.94E+00	cpt
250.4	1.00E+01	2.78E+00	cpt

Conductivity Data at RPT6

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
249.4	2.00E+01	5.55E+00	cpt
248.4	2.19E+01	6.09E+00	cpt
247.4	2.17E+01	6.04E+00	cpt
246.4	1.85E+01	5.15E+00	cpt
245.4	1.56E+01	4.34E+00	cpt
244.4	1.59E+01	4.43E+00	cpt
243.4	8.32E+00	2.31E+00	cpt
242.4	7.00E-04	1.90E-04	cpt
241.4	4.91E-01	1.36E-01	cpt
240.4	3.79E+00	1.05E+00	cpt
239.4	7.40E+00	2.06E+00	cpt
238.4	1.54E+01	4.27E+00	cpt
237.4	2.38E+01	6.60E+00	cpt
236.4	2.38E+01	6.60E+00	cpt
235.4	2.30E+01	6.38E+00	cpt
234.4	2.34E+01	6.50E+00	cpt
233.4	2.09E+01	5.81E+00	cpt
232.4	2.08E+01	5.79E+00	cpt
231.4	2.13E+01	5.92E+00	cpt
230.4	1.38E+01	3.82E+00	cpt
229.4	5.26E-03	1.46E-03	cpt
228.4	1.55E-03	4.30E-04	cpt
226.9	1.22E-02	3.40E-03	perm
225.9	5.51E-02	1.53E-02	perm
224.4	5.82E-01	1.62E-01	cpt
223.4	1.52E+01	4.22E+00	cpt
222.4	1.40E+01	3.89E+00	cpt
221.4	1.32E-02	3.67E-03	cpt
220.4	2.30E+01	6.39E+00	cpt
219.4	7.59E+01	2.11E+01	cpt
218.4	4.15E+01	1.15E+01	cpt
216.9	6.23E+00	1.73E+00	perm
215.4	1.76E+01	4.88E+00	cpt
214.4	1.73E+01	4.81E+00	cpt
213.4	9.42E+00	2.62E+00	cpt
212.4	1.64E+01	4.57E+00	cpt
211.4	1.89E+01	5.25E+00	cpt
210.4	1.83E+01	5.09E+00	cpt
209.4	1.63E+01	4.54E+00	cpt
208.4	1.78E+01	4.95E+00	cpt
207.4	1.91E+01	5.32E+00	cpt
206.4	2.27E+01	6.30E+00	cpt
205.4	2.67E+01	7.43E+00	cpt
204.4	3.04E+01	8.43E+00	cpt
203.4	4.06E+01	1.13E+01	cpt
202.4	5.73E+01	1.59E+01	cpt
201.4	5.50E+01	1.53E+01	cpt
200.4	2.31E+01	6.41E+00	cpt

Conductivity Data at RPT6

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
199.4	1.43E-03	4.00E-04	cpt
198.4	5.40E-04	1.50E-04	cpt
197.4	7.90E-04	2.20E-04	cpt
196.4	1.17E+01	3.25E+00	cpt
195.4	2.23E+01	6.18E+00	cpt
194.4	2.86E+01	7.93E+00	cpt
193.4	4.27E+01	1.19E+01	cpt
192.4	4.02E+01	1.12E+01	cpt
191.4	1.15E+01	3.20E+00	cpt
190.4	8.30E-04	2.30E-04	cpt
189.4	8.29E-03	2.30E-03	cpt
188.4	7.70E-04	2.20E-04	cpt
187.4	5.90E-04	1.60E-04	cpt
186.4	8.60E-04	2.40E-04	cpt
185.4	7.70E-04	2.10E-04	cpt
184.4	8.80E-04	2.40E-04	cpt
183.4	1.03E-03	2.90E-04	cpt
181.9	2.25E-04	6.24E-05	perm
180.9	4.50E-04	1.25E-04	perm
179.4	4.98E-02	1.38E-02	cpt
178.4	1.78E-01	4.95E-02	cpt
177.4	1.16E-03	3.20E-04	cpt
176.4	1.03E-03	2.90E-04	cpt
175.4	9.00E-04	2.50E-04	cpt
174.4	1.62E+01	4.50E+00	cpt
173.4	1.25E-02	3.47E-03	cpt
172.4	5.21E-03	1.45E-03	cpt
171.4	3.64E-03	1.01E-03	cpt
169.9	1.53E+01	4.25E+00	perm
168.4	5.86E+00	1.63E+00	cpt
167.4	4.05E+01	1.13E+01	cpt
166.4	2.89E+01	8.04E+00	cpt
165.4	1.64E+01	4.56E+00	cpt
164.4	5.42E+01	1.51E+01	cpt
163.4	1.00E+02	2.78E+01	cpt
162.4	1.00E+02	2.78E+01	cpt
161.4	2.85E+01	7.90E+00	cpt
160.4	1.61E+01	4.46E+00	cpt
159.4	5.05E+01	1.40E+01	cpt
158.4	1.00E+02	2.78E+01	cpt
157.4	8.91E+01	2.48E+01	cpt
156.4	4.42E+01	1.23E+01	cpt
155.4	1.20E-01	3.32E-02	cpt
154.4	6.88E+00	1.91E+00	cpt
153.4	7.76E+00	2.16E+00	cpt
152.4	3.58E-03	9.90E-04	cpt
151.4	5.76E-01	1.60E-01	cpt
150.4	1.19E+01	3.31E+00	cpt

Conductivity Data at RPT6

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
149.4	6.00E-04	1.70E-04	cpt
148.4	1.28E+01	3.56E+00	cpt
147.4	3.39E-03	9.40E-04	cpt
146.4	7.42E+00	2.06E+00	cpt
145.4	1.20E+01	3.34E+00	cpt
144.4	1.39E+01	3.87E+00	cpt
143.4	3.30E-01	9.18E-02	cpt
142.4	5.50E-04	1.50E-04	cpt
141.4	4.20E-04	1.20E-04	cpt
140.4	5.67E-02	1.58E-02	cpt
139.4	4.80E-04	1.30E-04	cpt
138.4	6.40E-04	1.80E-04	cpt
137.4	8.80E-04	2.50E-04	cpt
136.4	1.14E+01	3.18E+00	cpt
135.4	1.76E+01	4.89E+00	cpt
134.4	1.26E-02	3.50E-03	cpt

Conductivity Data at RPT7

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
308.0	6.10E+00	1.70E+00	cpt
307.0	2.18E+01	6.06E+00	cpt
306.0	6.15E+00	1.71E+00	cpt
305.0	5.57E+00	1.55E+00	cpt
304.0	1.42E+01	3.95E+00	cpt
303.0	1.49E+01	4.15E+00	cpt
302.0	5.68E-02	1.58E-02	cpt
301.0	9.87E-02	2.74E-02	cpt
300.0	1.77E-02	4.92E-03	cpt
299.0	7.94E-02	2.20E-02	cpt
298.0	1.18E-02	3.26E-03	cpt
297.0	2.28E-03	6.30E-04	cpt
296.0	1.06E-03	3.00E-04	cpt
295.0	1.50E-03	4.20E-04	cpt
294.0	1.65E-03	4.60E-04	cpt
293.0	1.72E-03	4.80E-04	cpt
292.0	8.05E+00	2.24E+00	cpt
291.0	1.07E+01	2.96E+00	cpt
290.0	2.66E+01	7.38E+00	cpt
289.0	2.13E+01	5.91E+00	cpt
288.0	1.47E-03	4.10E-04	cpt
287.0	1.25E-03	3.50E-04	cpt
286.0	1.19E+01	3.31E+00	cpt
285.0	2.18E+00	6.05E-01	cpt
284.0	5.03E-01	1.40E-01	cpt
283.0	7.40E+01	2.06E+01	cpt
282.0	1.00E+02	2.78E+01	cpt
281.0	7.31E+00	2.03E+00	cpt
280.0	5.63E+00	1.57E+00	cpt
279.0	3.58E-02	9.94E-03	cpt
278.0	1.33E+00	3.68E-01	cpt
277.0	1.14E+01	3.17E+00	cpt
276.0	7.71E+00	2.14E+00	cpt
275.0	1.46E+00	4.05E-01	cpt
274.0	8.90E+00	2.47E+00	cpt
273.0	1.75E+01	4.85E+00	cpt
272.0	1.44E+01	4.00E+00	cpt
271.0	1.78E+01	4.95E+00	cpt
270.0	8.82E+00	2.45E+00	cpt
269.0	8.08E+00	2.25E+00	cpt
268.0	1.00E+02	2.78E+01	cpt
267.0	1.00E+02	2.78E+01	cpt
266.0	2.42E+00	6.73E-01	cpt
265.0	1.00E+02	2.78E+01	cpt
264.0	1.85E-01	5.13E-02	cpt
263.0	1.66E-01	4.61E-02	cpt
262.0	2.26E-01	6.29E-02	cpt
261.0	8.85E-03	2.46E-03	cpt

Conductivity Data at RPT7

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
260.0	1.67E-02	4.65E-03	cpt
259.0	1.30E-03	3.60E-04	cpt
258.0	4.21E-03	1.17E-03	cpt
257.0	1.61E-03	4.50E-04	cpt
256.0	1.25E-03	3.50E-04	cpt
255.0	1.18E-03	3.30E-04	cpt
254.0	9.30E-04	2.60E-04	cpt
253.0	9.40E-04	2.60E-04	cpt
252.0	8.00E-04	2.20E-04	cpt
251.0	8.50E-04	2.40E-04	cpt
250.0	9.10E-04	2.50E-04	cpt
249.0	1.08E-03	3.00E-04	cpt
248.0	7.40E-04	2.10E-04	cpt
247.0	7.40E-04	2.10E-04	cpt
246.0	6.80E-04	1.90E-04	cpt
245.0	8.00E-04	2.20E-04	cpt
244.0	6.76E+00	1.88E+00	cpt
243.0	8.68E-02	2.41E-02	cpt
242.0	8.90E-04	2.50E-04	cpt
241.0	1.49E-03	4.10E-04	cpt
240.0	7.87E+00	2.19E+00	cpt
239.0	4.33E-01	1.20E-01	cpt
238.0	1.07E-03	3.00E-04	cpt
237.0	9.06E+00	2.52E+00	cpt
236.0	1.30E+01	3.62E+00	cpt
235.0	3.88E+00	1.08E+00	cpt
234.0	5.08E-01	1.41E-01	cpt
233.0	8.48E+00	2.36E+00	cpt
232.0	1.14E+00	3.15E-01	cpt
231.0	3.02E-03	8.40E-04	cpt
230.0	2.02E-01	5.61E-02	cpt
229.0	5.63E+00	1.56E+00	cpt
228.0	1.91E+01	5.29E+00	cpt
227.0	1.75E+01	4.86E+00	cpt
226.0	1.31E+00	3.63E-01	cpt
225.0	2.13E+00	5.92E-01	cpt
224.0	1.55E-01	4.31E-02	cpt
223.0	9.43E-02	2.62E-02	cpt
222.0	4.61E-01	1.28E-01	cpt
221.0	5.88E+00	1.63E+00	cpt
220.0	3.69E-01	1.03E-01	cpt
219.0	4.16E+00	1.16E+00	cpt
218.0	1.00E+01	2.79E+00	cpt
217.0	6.40E+00	1.78E+00	cpt
216.0	1.43E+00	3.98E-01	cpt
215.0	2.39E+01	6.63E+00	cpt
214.0	4.52E+01	1.26E+01	cpt
213.0	5.63E+01	1.56E+01	cpt

Conductivity Data at RPT7

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
212.0	4.58E+01	1.27E+01	cpt
211.0	4.60E+01	1.28E+01	cpt
210.0	4.07E+01	1.13E+01	cpt
209.0	3.62E+01	1.00E+01	cpt
208.0	3.99E+01	1.11E+01	cpt
207.0	4.29E+01	1.19E+01	cpt
206.0	4.87E+01	1.35E+01	cpt
205.0	6.18E+01	1.72E+01	cpt
204.0	5.53E+01	1.54E+01	cpt
203.0	1.97E+00	5.47E-01	cpt
202.0	4.05E-03	1.13E-03	cpt
201.0	1.37E-02	3.79E-03	cpt
200.0	1.18E-02	3.28E-03	cpt
199.0	6.20E+01	1.72E+01	cpt
198.0	1.00E+02	2.78E+01	cpt
197.0	1.00E+02	2.78E+01	cpt
196.0	1.00E+02	2.78E+01	cpt
195.0	1.00E+02	2.78E+01	cpt
194.0	1.00E+02	2.78E+01	cpt
193.0	8.60E+01	2.39E+01	cpt
192.0	8.72E+01	2.42E+01	cpt
191.0	1.00E+02	2.78E+01	cpt
190.0	1.00E+02	2.78E+01	cpt
189.0	8.67E+01	2.41E+01	cpt
188.0	5.56E+01	1.54E+01	cpt
187.0	4.73E+01	1.31E+01	cpt
186.0	4.48E+01	1.24E+01	cpt
185.0	4.30E+01	1.20E+01	cpt
184.0	2.92E+01	8.11E+00	cpt
183.0	2.60E+01	7.23E+00	cpt
182.0	3.30E+01	9.18E+00	cpt
181.0	3.03E+01	8.42E+00	cpt
180.0	2.97E+01	8.24E+00	cpt
179.0	2.61E+01	7.24E+00	cpt
178.0	3.22E+01	8.96E+00	cpt
177.0	3.79E+01	1.05E+01	cpt
176.0	2.29E+01	6.36E+00	cpt
175.0	6.66E-02	1.85E-02	cpt
174.0	1.67E-03	4.60E-04	cpt
173.0	1.92E+00	5.33E-01	cpt
172.0	1.37E-03	3.80E-04	cpt
171.0	1.72E-03	4.80E-04	cpt
170.0	7.70E-04	2.20E-04	cpt
169.0	6.88E-01	1.91E-01	cpt
168.0	2.76E+01	7.66E+00	cpt
167.0	2.63E+01	7.30E+00	cpt
166.0	2.81E+01	7.80E+00	cpt
165.0	2.86E+01	7.95E+00	cpt

Conductivity Data at RPT7

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
164.0	3.01E+01	8.37E+00	cpt
163.0	2.65E-01	7.37E-02	cpt
162.0	5.05E-01	1.40E-01	cpt
161.0	1.68E-03	4.70E-04	cpt
160.0	1.24E-03	3.50E-04	cpt
159.0	3.17E-03	8.80E-04	cpt
158.0	2.15E-03	6.00E-04	cpt
157.0	2.59E+00	7.19E-01	cpt
156.0	4.36E+01	1.21E+01	cpt
155.0	3.96E+01	1.10E+01	cpt
154.0	6.64E-03	1.84E-03	cpt
153.0	2.45E-02	6.81E-03	cpt
152.0	7.87E+01	2.19E+01	cpt
151.0	3.78E+01	1.05E+01	cpt
150.0	4.49E+01	1.25E+01	cpt
149.0	1.00E+02	2.78E+01	cpt
148.0	1.00E+02	2.78E+01	cpt
147.0	4.40E+01	1.22E+01	cpt
146.0	2.94E+01	8.15E+00	cpt
145.0	6.49E+01	1.80E+01	cpt
144.0	2.69E+01	7.47E+00	cpt
143.0	7.31E+01	2.03E+01	cpt
142.0	1.00E+02	2.78E+01	cpt
141.0	1.00E+02	2.78E+01	cpt
140.0	6.38E+01	1.77E+01	cpt
139.0	4.41E+01	1.22E+01	cpt
138.0	1.00E+02	2.78E+01	cpt
137.0	1.00E+02	2.78E+01	cpt
136.0	1.00E+02	2.78E+01	cpt
135.0	6.88E+01	1.91E+01	cpt
134.0	1.00E+02	2.78E+01	cpt
133.0	1.00E+02	2.78E+01	cpt
132.0	7.58E+01	2.11E+01	cpt
131.0	2.35E+01	6.53E+00	cpt
130.0	2.47E+01	6.85E+00	cpt
129.0	1.00E+02	2.78E+01	cpt
128.0	1.00E+02	2.78E+01	cpt
127.0	1.00E+02	2.78E+01	cpt
126.0	3.89E+01	1.08E+01	cpt
125.0	6.97E+01	1.94E+01	cpt
124.0	6.90E+01	1.92E+01	cpt
123.0	7.08E+01	1.97E+01	cpt
122.0	1.00E+02	2.78E+01	cpt
121.0	1.00E+02	2.78E+01	cpt
120.0	1.00E+02	2.78E+01	cpt
119.0	1.00E+02	2.78E+01	cpt
118.0	1.00E+02	2.78E+01	cpt
117.0	1.00E+02	2.78E+01	cpt

Conductivity Data at RPT7

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
116.0	1.00E+02	2.78E+01	cpt
115.0	1.00E+02	2.78E+01	cpt
114.0	1.00E+02	2.78E+01	cpt
113.0	5.86E+01	1.63E+01	cpt
112.0	4.88E+01	1.36E+01	cpt
111.0	8.84E+01	2.45E+01	cpt
110.0	1.00E+02	2.78E+01	cpt
109.0	1.00E+02	2.78E+01	cpt
108.0	1.00E+02	2.78E+01	cpt
107.0	1.00E+02	2.78E+01	cpt
106.0	1.00E+02	2.78E+01	cpt
105.0	1.00E+02	2.78E+01	cpt
104.0	1.00E+02	2.78E+01	cpt
103.0	1.00E+02	2.78E+01	cpt
102.0	1.00E+02	2.78E+01	cpt
101.0	1.00E+02	2.78E+01	cpt
100.0	5.10E+01	1.42E+01	cpt

Conductivity Data at RPT8

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
307.4	1.00E+01	2.78E+00	cpt
306.4	3.26E+01	9.06E+00	cpt
305.4	1.56E+01	4.34E+00	cpt
304.4	6.22E+00	1.73E+00	cpt
303.4	6.28E+00	1.74E+00	cpt
302.4	8.72E+00	2.42E+00	cpt
301.4	6.55E+00	1.82E+00	cpt
300.4	1.24E-02	3.45E-03	cpt
299.4	2.59E-03	7.20E-04	cpt
298.4	7.50E-01	2.08E-01	cpt
297.4	1.62E-01	4.50E-02	cpt
296.4	2.79E-03	7.70E-04	cpt
295.4	1.45E-03	4.00E-04	cpt
294.4	7.92E+00	2.20E+00	cpt
293.4	3.70E-02	1.03E-02	cpt
292.4	1.70E-03	4.70E-04	cpt
291.4	2.53E-03	7.00E-04	cpt
290.4	2.52E-03	7.00E-04	cpt
289.4	1.47E-03	4.10E-04	cpt
288.4	1.24E-02	3.44E-03	cpt
287.4	1.96E-03	5.40E-04	cpt
286.4	2.99E-03	8.30E-04	cpt
285.4	2.32E-03	6.40E-04	cpt
284.4	3.22E-03	8.90E-04	cpt
283.4	1.03E-03	2.90E-04	cpt
282.4	9.50E-04	2.60E-04	cpt
281.4	8.80E-04	2.40E-04	cpt
280.4	6.60E-04	1.80E-04	cpt
279.4	7.27E+00	2.02E+00	cpt
278.4	4.94E-01	1.37E-01	cpt
277.4	2.15E+00	5.97E-01	cpt
276.4	4.11E-01	1.14E-01	cpt
275.4	1.26E-03	3.50E-04	cpt
274.4	1.10E-03	3.00E-04	cpt
273.4	1.05E-03	2.90E-04	cpt
272.4	8.30E-04	2.30E-04	cpt
271.4	7.80E-04	2.20E-04	cpt
270.4	7.40E-04	2.10E-04	cpt
269.4	7.50E-04	2.10E-04	cpt
268.4	5.60E-04	1.60E-04	cpt
267.4	4.60E-04	1.30E-04	cpt
266.4	5.10E-04	1.40E-04	cpt
265.4	5.00E-04	1.40E-04	cpt
264.4	7.20E-04	2.00E-04	cpt
263.4	8.50E-04	2.40E-04	cpt
262.4	2.94E-03	8.20E-04	cpt
261.4	7.70E-04	2.10E-04	cpt
260.4	5.90E-04	1.60E-04	cpt

Conductivity Data at RPT8

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
259.4	7.40E-04	2.10E-04	cpt
258.4	4.70E-04	1.30E-04	cpt
257.4	4.90E-04	1.40E-04	cpt
256.4	4.90E-04	1.40E-04	cpt
255.4	6.41E-03	1.78E-03	cpt
254.4	5.50E-04	1.50E-04	cpt
253.4	1.01E-03	2.80E-04	cpt
252.4	1.11E-03	3.10E-04	cpt
251.4	6.30E+00	1.75E+00	cpt
250.4	5.05E-03	1.40E-03	cpt
249.4	4.92E-03	1.37E-03	cpt
248.4	6.01E+00	1.67E+00	cpt
247.4	6.62E+00	1.84E+00	cpt
246.4	9.49E-01	2.64E-01	cpt
245.4	2.50E-02	6.94E-03	cpt
244.4	2.76E-02	7.66E-03	cpt
243.4	7.12E+00	1.98E+00	cpt
242.4	7.22E+00	2.01E+00	cpt
241.4	8.60E+00	2.39E+00	cpt
240.4	1.00E+01	2.79E+00	cpt
239.4	1.20E+01	3.34E+00	cpt
238.4	1.37E+01	3.80E+00	cpt
237.4	1.41E+01	3.91E+00	cpt
236.4	3.79E-03	1.05E-03	cpt
235.4	9.90E-04	2.80E-04	cpt
234.4	3.36E+00	9.33E-01	cpt
233.4	7.02E+00	1.95E+00	cpt
232.4	7.00E+00	1.95E+00	cpt
231.4	8.04E+00	2.23E+00	cpt
230.4	8.30E-04	2.30E-04	cpt
229.4	6.60E-04	1.80E-04	cpt
228.4	1.24E-03	3.40E-04	cpt
227.4	3.18E-03	8.80E-04	cpt
226.4	2.65E+00	7.35E-01	cpt
225.4	1.72E+01	4.77E+00	cpt
224.4	2.38E+01	6.62E+00	cpt
223.4	1.46E+01	4.05E+00	cpt
222.4	9.06E+00	2.52E+00	cpt
221.4	4.25E-03	1.18E-03	cpt
220.4	1.56E-02	4.34E-03	cpt
219.4	2.04E-03	5.70E-04	cpt
218.4	6.25E-01	1.74E-01	cpt
217.4	7.22E-03	2.00E-03	cpt
216.4	1.81E+01	5.02E+00	cpt
215.4	2.18E+01	6.06E+00	cpt
214.4	1.41E+01	3.91E+00	cpt
213.4	2.23E+01	6.18E+00	cpt
212.4	1.19E+01	3.31E+00	cpt

Conductivity Data at RPT8

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
211.4	1.80E+01	4.99E+00	cpt
210.4	1.29E+01	3.59E+00	cpt
209.4	1.99E+01	5.54E+00	cpt
208.4	2.40E+01	6.66E+00	cpt
207.4	2.09E+01	5.80E+00	cpt
206.4	7.57E-03	2.10E-03	cpt
205.4	8.90E-04	2.50E-04	cpt
204.4	4.00E-03	1.11E-03	cpt
203.4	4.63E+00	1.29E+00	cpt
202.4	3.55E-03	9.90E-04	cpt
201.4	4.69E-01	1.30E-01	cpt
200.4	3.72E+00	1.04E+00	cpt
199.4	1.04E+01	2.88E+00	cpt
198.4	1.83E+01	5.09E+00	cpt
197.4	6.38E+00	1.77E+00	cpt
196.4	2.98E+00	8.29E-01	cpt
195.4	1.67E+00	4.64E-01	cpt
194.4	2.00E+00	5.57E-01	cpt
193.4	5.49E+00	1.53E+00	cpt
192.4	8.89E+00	2.47E+00	cpt
191.4	3.62E+01	1.01E+01	cpt
190.4	3.49E+01	9.71E+00	cpt
189.4	3.49E+01	9.68E+00	cpt
188.4	2.73E+01	7.57E+00	cpt
187.4	1.63E+01	4.52E+00	cpt
186.4	2.81E+01	7.81E+00	cpt
185.4	3.17E+01	8.80E+00	cpt
184.4	2.98E+01	8.29E+00	cpt
183.4	2.93E+01	8.14E+00	cpt
182.4	3.27E+01	9.07E+00	cpt
181.4	4.93E+01	1.37E+01	cpt
180.4	3.90E+01	1.08E+01	cpt
179.4	3.24E+01	9.01E+00	cpt
178.4	3.07E+01	8.53E+00	cpt
177.4	1.19E-02	3.29E-03	cpt
176.4	2.06E-03	5.70E-04	cpt
175.4	4.06E-02	1.13E-02	cpt
174.4	1.69E-02	4.71E-03	cpt
173.4	8.53E+00	2.37E+00	cpt
172.4	1.64E+01	4.57E+00	cpt
171.4	4.45E+01	1.24E+01	cpt
170.4	5.13E+01	1.42E+01	cpt
169.4	4.84E-02	1.34E-02	cpt
168.4	1.39E-03	3.90E-04	cpt
167.4	2.27E-01	6.31E-02	cpt
166.4	2.04E-03	5.70E-04	cpt
165.4	3.44E-03	9.60E-04	cpt
164.4	2.06E+00	5.73E-01	cpt

Conductivity Data at RPT8

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
163.4	2.80E-01	7.78E-02	cpt
162.4	5.70E-03	1.58E-03	cpt
161.4	4.78E-03	1.33E-03	cpt
160.4	8.56E-01	2.38E-01	cpt
159.4	6.39E-01	1.78E-01	cpt
158.4	4.91E+00	1.37E+00	cpt
157.4	5.06E-01	1.41E-01	cpt
156.4	2.24E-02	6.23E-03	cpt
155.4	4.88E+01	1.36E+01	cpt
154.4	4.72E+01	1.31E+01	cpt
153.4	4.43E+01	1.23E+01	cpt
152.4	6.68E+01	1.86E+01	cpt
151.4	4.13E+01	1.15E+01	cpt
150.4	1.00E+02	2.78E+01	cpt
149.4	1.00E+02	2.78E+01	cpt
148.4	1.00E+02	2.78E+01	cpt
147.4	1.00E+02	2.78E+01	cpt
146.4	1.00E+02	2.78E+01	cpt
145.4	1.00E+02	2.78E+01	cpt
144.4	1.00E+02	2.78E+01	cpt
143.4	1.00E+02	2.78E+01	cpt
142.4	1.00E+02	2.78E+01	cpt
141.4	1.00E+02	2.78E+01	cpt
140.4	1.00E+02	2.78E+01	cpt
139.4	1.00E+02	2.78E+01	cpt
138.4	8.12E+01	2.25E+01	cpt
137.4	1.00E+02	2.78E+01	cpt
136.4	8.21E+01	2.28E+01	cpt
135.4	1.00E+02	2.78E+01	cpt
134.4	1.00E+02	2.78E+01	cpt
133.4	1.00E+02	2.78E+01	cpt
132.4	1.00E+02	2.78E+01	cpt
131.4	3.90E+01	1.09E+01	cpt
130.4	4.62E+01	1.28E+01	cpt
129.4	7.10E+01	1.97E+01	cpt
128.4	4.16E+01	1.15E+01	cpt
127.4	8.54E-01	2.37E-01	cpt
126.4	3.11E+01	8.63E+00	cpt
125.4	2.38E+01	6.60E+00	cpt
124.4	1.49E+01	4.13E+00	cpt
123.4	2.12E+01	5.88E+00	cpt
122.4	4.12E+01	1.14E+01	cpt
121.4	7.04E+01	1.96E+01	cpt
120.4	4.57E+01	1.27E+01	cpt
119.4	3.03E+01	8.42E+00	cpt
118.4	2.61E+01	7.25E+00	cpt
117.4	2.51E+01	6.97E+00	cpt
116.4	2.13E+01	5.92E+00	cpt

Conductivity Data at RPT8

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
115.4	2.05E+01	5.71E+00	cpt
114.4	2.01E+01	5.59E+00	cpt
113.4	2.08E+01	5.78E+00	cpt
112.4	2.24E+01	6.22E+00	cpt
111.4	1.93E+01	5.37E+00	cpt
110.4	1.52E+01	4.23E+00	cpt
109.4	1.11E+01	3.10E+00	cpt
108.4	1.41E+01	3.90E+00	cpt
107.4	1.49E+01	4.14E+00	cpt
106.4	1.69E+01	4.69E+00	cpt
105.4	1.77E+01	4.91E+00	cpt
104.4	2.18E+01	6.05E+00	cpt
103.4	1.91E+01	5.31E+00	cpt
102.4	1.49E+01	4.13E+00	cpt
101.4	1.27E+01	3.53E+00	cpt
100.4	1.41E+01	3.91E+00	cpt
99.4	1.00E+02	2.78E+01	cpt
98.4	5.86E-02	1.63E-02	cpt

Conductivity Data at RPT9

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
301.2	3.72E+00	1.03E+00	cpt
300.2	3.85E+00	1.07E+00	cpt
299.2	4.10E+00	1.14E+00	cpt
298.2	5.06E+00	1.40E+00	cpt
297.2	5.27E+00	1.46E+00	cpt
296.2	6.22E+00	1.73E+00	cpt
295.2	2.47E+00	6.85E-01	cpt
294.2	3.40E-04	1.00E-04	cpt
293.2	3.60E-04	1.00E-04	cpt
292.2	3.50E-04	1.00E-04	cpt
291.2	3.30E-04	9.00E-05	cpt
290.2	3.30E-04	9.00E-05	cpt
289.2	3.40E-04	9.00E-05	cpt
288.2	3.30E-04	9.00E-05	cpt
287.2	3.40E-04	9.00E-05	cpt
286.2	3.50E-04	1.00E-04	cpt
285.2	2.88E-01	8.01E-02	cpt
284.2	3.74E+00	1.04E+00	cpt
283.2	2.85E-01	7.91E-02	cpt
282.2	1.07E+01	2.98E+00	cpt
281.2	9.38E+00	2.61E+00	cpt
280.2	1.17E+01	3.26E+00	cpt
279.2	3.40E-04	9.00E-05	cpt
278.2	1.59E+01	4.42E+00	cpt
277.2	2.03E+01	5.62E+00	cpt
276.2	5.70E+01	1.58E+01	cpt
275.2	4.50E+01	1.25E+01	cpt
274.2	3.05E+01	8.47E+00	cpt
273.2	9.26E+00	2.57E+00	cpt
272.2	8.38E-01	2.33E-01	cpt
271.2	5.23E-02	1.45E-02	cpt
270.2	8.90E-04	2.50E-04	cpt
269.2	1.03E-01	2.87E-02	cpt
268.2	2.52E+01	6.99E+00	cpt
267.2	5.98E-01	1.66E-01	cpt
266.2	6.29E-01	1.75E-01	cpt
265.2	3.76E-03	1.04E-03	cpt
264.2	3.35E-03	9.30E-04	cpt
263.2	6.60E-04	1.80E-04	cpt
262.2	6.10E-04	1.70E-04	cpt
261.2	7.10E-04	2.00E-04	cpt
260.2	4.49E-02	1.25E-02	cpt
259.2	2.80E-01	7.77E-02	cpt
258.2	1.95E-01	5.41E-02	cpt
257.2	8.52E-03	2.37E-03	cpt
256.2	1.30E-03	3.60E-04	cpt
255.2	9.40E-03	2.61E-03	cpt
254.2	5.79E-03	1.61E-03	cpt

Conductivity Data at RPT9

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
253.2	4.03E+00	1.12E+00	cpt
252.2	6.55E-02	1.82E-02	cpt
251.2	6.10E-04	1.70E-04	cpt
250.2	3.58E+00	9.95E-01	cpt
249.2	2.85E+01	7.91E+00	cpt
248.2	7.30E-04	2.00E-04	cpt
247.2	5.90E-04	1.60E-04	cpt
246.2	5.80E-04	1.60E-04	cpt
245.2	8.83E-02	2.45E-02	cpt
244.2	3.11E-02	8.63E-03	cpt
243.2	9.00E+00	2.50E+00	cpt
242.2	6.82E+00	1.89E+00	cpt
241.2	6.41E+00	1.78E+00	cpt
240.2	7.89E+00	2.19E+00	cpt
239.2	1.09E+01	3.01E+00	cpt
238.2	7.91E+00	2.20E+00	cpt
237.2	2.44E-02	6.79E-03	cpt
236.2	7.59E+00	2.11E+00	cpt
235.2	1.03E+01	2.86E+00	cpt
234.2	9.24E+00	2.57E+00	cpt
233.2	2.87E+01	7.98E+00	cpt
232.2	1.30E+01	3.60E+00	cpt
231.2	1.70E+01	4.72E+00	cpt
230.2	2.15E+01	5.97E+00	cpt
229.2	1.64E+01	4.55E+00	cpt
228.2	3.66E-01	1.02E-01	cpt
227.2	5.96E-01	1.66E-01	cpt
226.2	1.06E+01	2.94E+00	cpt
225.2	1.39E+01	3.85E+00	cpt
224.2	9.16E+00	2.54E+00	cpt
223.2	2.46E-03	6.80E-04	cpt
222.2	3.85E-01	1.07E-01	cpt
221.2	1.50E+00	4.17E-01	cpt
220.2	1.35E+00	3.74E-01	cpt
219.2	1.64E+01	4.54E+00	cpt
218.2	1.44E+01	4.01E+00	cpt
217.2	1.07E+01	2.97E+00	cpt
216.2	1.00E+01	2.78E+00	cpt
215.2	8.11E+00	2.25E+00	cpt
214.2	3.82E+00	1.06E+00	cpt
213.2	6.12E-01	1.70E-01	cpt
212.2	4.27E+00	1.19E+00	cpt
211.2	2.03E-03	5.60E-04	cpt
210.2	2.30E+01	6.38E+00	cpt
209.2	4.17E+01	1.16E+01	cpt
208.2	5.76E+01	1.60E+01	cpt
207.2	5.38E+01	1.49E+01	cpt
206.2	4.36E+01	1.21E+01	cpt

Conductivity Data at RPT9

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
205.2	3.32E+01	9.21E+00	cpt
204.2	2.72E+01	7.56E+00	cpt
203.2	3.25E+01	9.04E+00	cpt
202.2	3.38E+01	9.38E+00	cpt
201.2	2.97E+01	8.25E+00	cpt
200.2	1.36E+00	3.77E-01	cpt
199.2	2.42E-03	6.70E-04	cpt
198.2	2.19E-01	6.08E-02	cpt
197.2	7.35E-03	2.04E-03	cpt
196.2	1.94E+01	5.38E+00	cpt
195.2	4.49E+00	1.25E+00	cpt
194.2	1.00E+02	2.78E+01	cpt
193.2	1.00E+02	2.78E+01	cpt
192.2	1.00E+02	2.78E+01	cpt
191.2	1.00E+02	2.78E+01	cpt
190.2	1.00E+02	2.78E+01	cpt
189.2	1.00E+02	2.78E+01	cpt
188.2	5.58E+01	1.55E+01	cpt
187.2	3.89E+01	1.08E+01	cpt
186.2	3.37E+01	9.35E+00	cpt
185.2	4.03E+01	1.12E+01	cpt
184.2	3.92E+01	1.09E+01	cpt
183.2	2.57E+01	7.13E+00	cpt
182.2	1.55E+00	4.32E-01	cpt
181.2	5.50E-02	1.53E-02	cpt
180.2	1.16E-03	3.20E-04	cpt
179.2	9.80E-04	2.70E-04	cpt
178.2	4.47E-02	1.24E-02	cpt
177.2	5.12E+01	1.42E+01	cpt
176.2	1.00E+02	2.78E+01	cpt
175.2	1.00E+02	2.78E+01	cpt
174.2	1.00E+02	2.78E+01	cpt
173.2	1.36E+01	3.78E+00	cpt
172.2	2.19E-01	6.09E-02	cpt
171.2	1.70E-03	4.70E-04	cpt
170.2	1.24E-02	3.44E-03	cpt
169.2	9.63E-03	2.68E-03	cpt
168.2	1.55E-02	4.31E-03	cpt
167.2	1.12E-01	3.11E-02	cpt
166.2	6.63E+00	1.84E+00	cpt
165.2	5.60E+01	1.56E+01	cpt
164.2	7.71E+01	2.14E+01	cpt
163.2	8.51E+01	2.36E+01	cpt
162.2	3.55E-01	9.87E-02	cpt
161.2	7.64E-03	2.12E-03	cpt
160.2	2.93E+01	8.13E+00	cpt
159.2	3.96E-03	1.10E-03	cpt
158.2	1.75E+00	4.85E-01	cpt

Conductivity Data at RPT9

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
157.2	2.03E-02	5.64E-03	cpt
156.2	4.52E-03	1.26E-03	cpt
155.2	1.76E+01	4.89E+00	cpt
154.2	3.59E+01	9.96E+00	cpt
153.2	3.02E+01	8.39E+00	cpt
152.2	2.24E+01	6.22E+00	cpt
151.2	2.50E+01	6.94E+00	cpt
150.2	2.92E+01	8.11E+00	cpt
149.2	2.56E+01	7.12E+00	cpt
148.2	4.83E+01	1.34E+01	cpt
147.2	4.47E+01	1.24E+01	cpt
146.2	4.90E+01	1.36E+01	cpt
145.2	9.69E+01	2.69E+01	cpt
144.2	8.58E+01	2.38E+01	cpt
143.2	7.57E+01	2.10E+01	cpt
142.2	6.71E+01	1.86E+01	cpt
141.2	5.08E+01	1.41E+01	cpt
140.2	4.21E+01	1.17E+01	cpt
139.2	5.29E+01	1.47E+01	cpt
138.2	3.14E+01	8.73E+00	cpt
137.2	8.12E+01	2.26E+01	cpt
136.2	8.66E+01	2.41E+01	cpt
135.2	9.04E+01	2.51E+01	cpt
134.2	1.00E+02	2.78E+01	cpt
133.2	5.99E+01	1.66E+01	cpt
132.2	3.44E+01	9.54E+00	cpt
131.2	2.00E+01	5.56E+00	cpt
130.2	2.74E+01	7.61E+00	cpt
129.2	1.42E+01	3.95E+00	cpt
128.2	2.15E+01	5.97E+00	cpt
127.2	2.52E+01	6.99E+00	cpt
126.2	1.82E+01	5.06E+00	cpt
125.2	1.87E+01	5.18E+00	cpt
124.2	2.48E+01	6.89E+00	cpt
123.2	1.41E+01	3.92E+00	cpt
122.2	1.86E+01	5.16E+00	cpt
121.2	1.79E+01	4.98E+00	cpt
120.2	1.68E+01	4.68E+00	cpt
119.2	1.84E+01	5.11E+00	cpt
118.2	1.61E+01	4.47E+00	cpt
117.2	2.07E+01	5.74E+00	cpt
116.2	1.74E+01	4.83E+00	cpt
115.2	1.67E+01	4.65E+00	cpt
114.2	1.75E+01	4.86E+00	cpt
113.2	1.60E+01	4.45E+00	cpt
112.2	1.54E+01	4.29E+00	cpt
111.2	1.43E+01	3.97E+00	cpt
110.2	1.91E+00	5.30E-01	cpt

Conductivity Data at RPT9

Elevation (ft)	Kh (ft/day)	Kv (ft/day)	Data Source
109.2	1.07E+01	2.98E+00	cpt
108.2	1.15E+01	3.19E+00	cpt
107.2	1.35E+01	3.74E+00	cpt
106.2	1.32E+01	3.67E+00	cpt
105.2	1.22E+01	3.39E+00	cpt
104.2	1.17E+01	3.25E+00	cpt
103.2	3.18E+01	8.84E+00	cpt
102.2	4.14E-03	1.15E-03	cpt
101.2	5.78E-03	1.60E-03	cpt
100.2	1.85E-01	5.14E-02	cpt
99.2	1.00E+02	2.78E+01	cpt
98.2	5.07E+01	1.41E+01	cpt

Appendix G

Model Calibration Runs

R-Reactor Area Run Sce

Model Scenario	Objectives	Grid Size	RMS					Average Diff	
			Gordon	lower	'AA'	'A'	Surface S.	Gordon	lower
Run 1		1	ND	ND	ND	ND	ND	ND	ND
Status		2	ND	ND	ND	ND	ND	ND	ND
Run2		2	0.5	2.6	28.3	12.5	7.4	0.5	2.6
Run 2A	Sensitivity	2	ND	ND	ND	ND	ND	ND	ND
Run2B	Sensitivity	2	ND	ND	ND	ND	ND	ND	ND
Run 2C	green clay sensitivity	2	ND	ND	ND	ND	ND	ND	ND
Run 2D	Sensitivity	2	1.3	1.2	30.6	12.4	13.5	ND	ND
Run 3	Smooth conductivity field	2	1.2	0.6	30.0	13.5	13.2	1.2	0.6
Run 3A	Increase head in 'AA' horizon	2	1.3	4.2	26.0	13.9	8.8	1.3	4.2
Run 3B	Increase head in 'AA' horizon	2	1.4	5.1	26.0	20.7	ND	1.4	5.1
Run 3C	Increase head in 'A' horizon	2	1.2	1.3	27.0	12.8	3.9	1.2	1.3
Run 4	Increase head in 'A' and Surface Soils	2	1.1	1.8	27.0	17.3	23.6	1.1	-1.8
Run 4A	Increase head in 'AA' horizon	2	1.3	2.6	19.0	14.2	19.0	1.3	2.6
Run 4B	Increase head in 'AA' horizon	2	1.3	4.2	16.6	9.1	7.5	1.3	4.2
Run 4C	Increase head in 'AA' horizon	2	1.3	5.3	14.0	12.6	15.0	1.3	5.3
Run 4D	Increase head in 'A', 'AA' and Surface S.	2	1.4	7.2	10.0	7.9	8.8	1.4	7.2
Run 5	Smooth conductivity field	2	1.4	6.0	8.0	5.5	5.3	1.4	6.0
Run 5A	Increase head in 'A' horizon	2	1.2	1.5	4.0	7.7	5.1	1.2	1.5
Run 5B	Decrease head in 'A' and Surface S.	2	1.2	1.0	3.5	6.0	3.3	1.2	1.0
Run 5C	Decrease head in 'A' and Surface S.	2	1.2	0.4	4.2	4.8	4.2	1.2	0.4
Run 5D	Sensitivity	2	1.3	5.4	11.5	13.7	19.0	1.3	5.4

Model Scenario	Objectives	Grid Size	RMS					Average D	
			Gordon	lower	'AA'	'A'	Above 'A'	Gordon	lower
Run 5E	Sensitivity	²	1.2	1.7	5.1	6.4	9.6	1.2	1.7
Run 5F	Sensitivity	²	1.2	0.4	3.9	5.2	6.7	1.2	0.4
Run 6	Decrease head south of R-Reactor	²	1.2	0.5	4.9	5.7	8.8	1.2	0.5
Run 6A	Increase head in AA', 'A' and Surface S.	²	1.2	1.6	3.0	4.1	3.3	1.2	1.6
Run 6B	Corrected head data	²	1.2	1.6	3.0	4.1	3.3	1.2	1.6
Run 6C	Update model	²	1.2	1.6	3.0	4.2	3.0	1.2	1.6
Run 6D	Increase curvature of water table	²	1.2	1.1	3.2	3.5	5.3	1.2	1.1
Run 6E	Increase curvature of water table	²	1.2	0.6	4.1	4.0	7.0	1.2	0.6
Run 6F	Update model	²	1.2	0.6	4.3	4.1	7.2	1.2	0.6
Run 7	Update model	²	1.2	0.6	4.2	3.4	6.0	1.2	0.6
Run 7A	Smooth conductivity field	²	1.2	0.7	4.9	7.6	6.9	1.2	0.7
Run 7B	Decrease head in 'A' and Surface S.	²	1.2	0.7	3.4	4.5	4.1	1.2	0.7
Run 7C	Update model	²	1.2	1.6	3.4	5.6	4.4	1.2	1.6
Run 7D	Decrease heads	²	1.2	0.3	5.2	2.8	4.2	1.2	0.3
Run 7E	Sensitivity	²	1.2	0.3	5.0	4.3	4.0	1.2	0.3
Run 8	Detailed calibration	²	1.1	0.9	5.3	3.4	4.1	1.1	-0.9
Run 8A	Sensitivity	²	1.1	0.8	4.2	3.0	4.7	1.1	-0.8
Run 8B	Improve northern water table	²	1.1	0.8	4.0	2.8	4.6	1.1	-0.8
Run 8C	Improve northern water table	²	1.1	0.8	4.0	2.8	4.5	1.1	-0.8
Run 9	Restrict conductivity	²	1.8	2.6	3.3	3.3	4.4	1.8	2.6
Run 9A	Sensitivity	²	1.9	4.8	3.4	5.1	4.3	1.9	4.8
Run 9B	Sensitivity	²	2.0	6.6	5.2	7.0	4.3	2.0	6.6
Run 9C	Decrease heads	²	1.7	0.9	3.6	3.8	4.0	1.7	0.9
Run 9D	Sensitivity	²	1.6	1.8	4.4	3.5	5.2	1.6	-1.8

ND - Not Determined

¹ - Number of columns = 92, Number of Rows = 84, Number of Layers = 9

² - Number of columns = 65, Number of Rows = 62, Number of Layers = 21