

REMEDY SELECTION PROGRESS REPORT

EPA CCR RULE COMPLIANCE

DOMINION ENERGY SOUTH CAROLINA: Wateree Station: Ash Pond

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Prepared by:



Brian S. Boutin, PG Nautilus Geologic Consulting, PLLC

Prepared for: Dominion Energy South Carolina 220 Operation Way Mail Code C221 Cayce, SC 29033



Stefan Bray, PE Garrett & Moore, Inc.



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1.0 INTRODUCTION

This document presents an update on the progress of selecting a remedy to address arsenic and lithium in groundwater in the vicinity of the Ash Pond at the Dominion Energy South Carolina (DESC) Wateree Generating Station in Wateree, Richland County, South Carolina (**Figure 1**) in accordance with 40 CFR Part 257.97 of the EPA Coal Combustion Residuals (CCR) Rule. The Ash Pond is a coal combustion residuals (CCR) handling facility as defined by the US Environmental Protection Agency (EPA) CCR Rule (40 CFR Part 257.93). Based on the results of a Release Characterization conducted at the Ash Pond, a *Release Characterization and Assessment of Corrective Measures* (ACM) report for the Ash Pond completed in June 2019 presents evaluations of the following alternatives for addressing arsenic and lithium in groundwater in the area of the Ash Pond:

- 1) Institutional Controls
- 2) Monitored Natural Attenuation (MNA)
- 3) Pump and Treat (Groundwater Extraction and Above-Ground Treatment)
- 4) In-Situ Chemical Reduction (ISCR)

Site studies indicate that the arsenic and lithium plumes in groundwater are in a state of dynamic equilibrium or decreasing in extent. Moreover, removal of the source material (coal ash and underlying 2 feet of soil) from the Ash Pond was completed in September 2019. Based on the evaluations of potential remedies presented in the ACM report, MNA appears to be potentially well suited as a remedy to reduce the concentrations of arsenic and lithium in groundwater to below the respective groundwater protection standards (GPSs). However, additional field and laboratory evaluations are necessary to confirm that MNA processes in the surficial aquifer are adequate to serve as a remedy for groundwater impact at the site.

The following sections present the components of the Remedy Selection Progress Report.



2.0 SOURCE REMOVAL

A Closure Plan for the Ash Pond was submitted to the South Carolina Department of Health and Environmental Control (DHEC) in January 2013 and approved in February 2013. The Closure Plan included provisions for removing the coal ash and the underlying 2 feet of soil via excavation and subsequently backfilling the pond with clean fill. Coal ash and soil removal operations were completed on September 11, 2019. From the period of 2012 through June 2016, coal ash was removed from the Ash Pond for recycling, and from July 2016 to September 11, 2019 coal ash removal was conducted as part of pond closure operations and was placed in the on-site Class 3, lined landfill for disposal. Approximately 2,150,000 cubic yards of coal ash was excavated and removed from the pond as of completion the pond closure construction activities on September 11, 2019, along with approximately 412,000 cubic yards of underlying soil (which were also disposed in the on-site landfill).



3.0 RESULTS OF ASSESSMENT MONITORING: AUGUST 2019

3.1 Groundwater Monitoring Well System

Seventeen groundwater monitoring wells comprise the EPA CCR Rule compliance monitoring well system for the Ash Pond. Twelve of the wells are completed as shallow Type II monitoring wells to monitor groundwater quality in the shallow surficial aquifer and five of the wells are completed as deeper, double-cased Type III monitoring wells to monitor groundwater quality in deeper zones of the surficial aquifer. A site location map is presented as **Figure 1** and a site map showing the locations and designations of the monitoring wells at Wateree Station is presented as **Figure 2**. Summaries of the monitoring well construction data, including completion depth, construction specifications, ground surface elevations, top of casing elevations, and top and bottom of well screen elevations are presented in **Table 1**.

3.2 Horizontal and Vertical Groundwater Flow

Groundwater elevation data derived from groundwater gauging conducted in August 2019 are presented in **Table 2**. A groundwater elevation contour map developed based on groundwater level gauging data measured in the site Type II EPA Rule compliance monitoring wells in August 2019 is presented as **Figure 3**. The groundwater contours depicted in **Figure 3** represent bulk groundwater flow in the surficial aquifer across the site. The geometric configuration of the potentiometric contours in **Figure 3** indicates that bulk groundwater flow in the surficial aquifer across the site bulk groundwater flow in the surficial aquifer to the Ash Pond is generally to the east and southeast toward the Wateree River. The hydraulic gradient of the water table beneath the Ash Pond ranges from approximately 0.009 ft./ft. to 0.003 ft./ft. from north to south across the area of the pond.

The average interstitial groundwater flow velocity (v_w) can be expressed according the relation $v_w = Ki/\eta$, where i is the hydraulic gradient, and η is the effective porosity of the aquifer material. Estimates of the horizontal interstitial groundwater flow velocity in the surficial aquifer were calculated as part of the Release Assessment based on hydraulic conductivity values derived from slug tests conducted in the groundwater monitoring wells in the area of the Ash Pond, groundwater elevation data from groundwater gauging conducted in March 2019, and estimates of effective porosity derived from the textural properties of the soils encountered during drilling of the monitoring wells, as well as grain size distribution analyses of selected samples of sediment collected from the



surficial aquifer during a hydrogeologic characterization conducted by others in 2006. The calculated geometric mean horizontal interstitial groundwater flow velocity was 0.18 ft./day (65.75 ft./yr.) for the surficial aquifer in the area of the Ash Pond.

Vertical potentiometric gradients denote the potential for groundwater to move vertically through an aquifer. Vertical gradients are calculated by dividing the difference in groundwater elevation between two adjacent monitoring wells with screens installed at different elevations in the saturated interval of interest by the vertical distance between the midpoints of the saturated interval of the well screens. Positive values denote downward vertical gradients whereas negative values denote upward vertical gradients.

The results of the vertical potentiometric gradient analysis indicate that downward vertical gradients were measured at monitoring well pairs MW-AP-03/03D, MW-AP-MW-AP-09/09D, and MW-AP-11/11D in August 2019 ranging in magnitude from 1.04×10^{-2} ft./ft. (MW-AP-09/09D) to 1.85×10^{-1} ft./ft. (MW-AP-03/03D). Upward gradients were measured at monitoring well pairs MW-AP-03D/03D2 and MW-AP-11D/11D2, at values of -1.67×10^{-1} ft./ft. (MW-AP-03D/03D2) and -1.99×10^{-1} ft./ft. (MW-AP-11/11D2). Inasmuch as downward hydraulic gradients were measured between monitoring wells MW-AP-03/03D and MW-AP-11/11D, and upward hydraulic gradients were measured at monitoring well pairs MW-AP-03D/03D2 and MW-AP-11D/11D2, a transition to an upward hydraulic gradient within the deeper surficial aquifer is evident from the data at well locations in close proximity to the Wateree River. As groundwater flow approaches a major discharge zone such as a river (e.g., the Wateree River), vertical potentiometric gradients typically become upward as groundwater flows to the discharge feature. The upward vertical potentiometric gradients measured at the deeper monitoring well pairs located hydraulically down gradient of the Ash Pond are consistent with this scenario.

3.2 Groundwater Sampling

In accordance with 40 CFR Part 257.95, the fourth round of Assessment Monitoring was conducted on August 27 and 28, 2019 and included groundwater sampling from all EPA CCR Rule compliance monitoring wells associated with the Ash Pond (see **Table 1** and **Figure 2**). One groundwater sample was collected from each of the monitoring wells during the Assessment Monitoring event. All groundwater samples collected from the monitoring wells for Assessment Monitoring in August 2019 were analyzed by South Carolina Certified laboratories (SCE&G Central Laboratory (Certification Number 32006) and GEL Laboratories, LLC (Certification Numbers 10120001 and 10120002)) for the constituents listed in Appendix III and Appendix IV of the EPA CCR Rule (40 CFR



Parts 257.50 through 257.107), as well as for total alkalinity, magnesium, potassium and sodium.

3.3 Results of Field and Laboratory Analyses of Groundwater Samples

Laboratory data sheets for groundwater samples collected from the compliance monitoring wells during the Assessment Monitoring events conducted in August 2019 are presented **Appendix A**. Historical results of field and laboratory analyses of groundwater samples collected from the Ash Pond monitoring wells for EPA CCR Rule compliance monitoring, including Assessment and Release Characterization groundwater quality monitoring, are presented in **Table 1** for the constituents listed in Appendix III and Appendix IV of the EPA CCR Rule. Groundwater Protection Standards (GPS) established for groundwater at the Ash Pond are indicated beneath the name of each CCR Rule Appendix IV constituent listed in **Table 1**.

During purging of groundwater from the monitoring wells and prior to sampling, measurements were made in the field of the pH, temperature, specific conductance, turbidity, oxidation-reduction potential (ORP), and dissolved oxygen (DO) concentrations. The results of the field analyses of these parameters are presented in **Table 1**.

The results of the field-measured water-guality parameters from the August 2019 Assessment Monitoring indicate that the values measured in groundwater collected from the site monitoring wells were within applicable stabilization criteria. Groundwater in the surficial aquifer at the site is slightly acidic to neutral based on the pH values measured in the field (3.89 to 6.72), with the lowest value being measure at background monitoring well MW-AP-01A. Specific conductance values ranged from 44 (MW-AP-01A) to 1,014 (MW-AP-01) μ S/cm in groundwater at the monitoring wells. Turbidity values ranged from 1.4 (MW-AP-01A) to 9.98 (MW-AP-10) NTUs. ORP values ranged from -105.6 (MW-AP-01) to 285.6 (MW-AP-03D2) mV, indicating generally mildly reducing conditions in groundwater in the surficial aguifer. Historically, ORP values in groundwater at the EPA CCR Rule monitoring wells located immediately adjacent to the Ash Pond (i.e., excluding background monitoring well MW-AP-01A) ranged from -128.7 to 285.6 mV, indicating moderately to mildly reducing conditions within groundwater in the surficial aquifer. DO concentrations ranged from 0.07 (MW-AP-10) to 3.71 (MW-AP-01A) mg/L, with most readings being less than 0.5 mg/L, indicating mostly hypoxic conditions in shallow groundwater at the site.



The results of the August 2019 Assessment Monitoring event indicate: 1) arsenic was detected at concentrations exceeding the GPS in groundwater of 10 μ g/L at monitoring wells MW-AP-02, MW-AP-03, MW-AP-03D, MW-AP-04, MW-AP-09, MW-AP-09D, MW-AP-10, MW-AP-11, MW-AP-11D, MW-AP-12 and MW-AP-13; 2) cobalt was detected at concentrations exceeding the GPS in groundwater of 6 μ g/L at monitoring wells, MW-AP-03D2, MW-AP-09D and MW-AP-11D; and 3) lithium was detected at concentrations exceeding the GPS in groundwater of 40 μ g/L at monitoring wells MW-AP-10 and MW-AP-11. No other CCR Rule Appendix IV constituents were detected in groundwater at concentrations in excess of the corresponding GPSs during the August 2019 Assessment Monitoring event except for combined Ra 226/228 at MW-AP-3D (5.59 pCi/L), MW-AP-11D (5.55 pCi/L) and MW-AP-11D2 (5.12 pCi/L), which marginally exceeded the GPS of 5.00 pCi/L.

It is noted that the highest concentration of arsenic in the groundwater samples collected from the shallow Type II monitoring wells was detected in the sample collected from MW-AP-09 (2,030 µg/L), which is located immediately hydraulically up gradient of the Ash Pond. In addition, the concentrations of arsenic detected in the groundwater samples collected from deep Type III monitoring wells MW-AP-03D (971 µg/Land MW-AP-11D (222 μ g/L) significantly exceeded the GPS of 10 μ g/L, while the concentration of arsenic detected in the groundwater sample collected from Type III monitoring well MW-AP-09D (38.3 μ g/L) only marginally exceeded the GPS. However, the concentrations of arsenic detected in the groundwater samples collected from deeper Type III monitoring wells MW-AP-03D2 (0.35 µg/L, estimated) and MW-AP-11D2 (1.6 μ g/L) were significantly lower than the GPS. Cobalt was only detected in concentrations exceeding the GPS of 6 µg/L in the groundwater samples collected from deep Type III monitoring wells MW-AP-03D2 (11.8 µg/L), MW-AP-9D (17.4 µg/L) and MW-AP-11D (8.9 µg/L)), which is consistent with the results of the of the Release Characterization and further supports a scenario in which the naturally occurring concentrations of cobalt in groundwater in the deep surficial aquifer exceed the GPS at some locations.

Isoconcentration contour maps of total arsenic and total lithium in shallow groundwater in the vicinity of the Ash Pond, based on the March 2019 groundwater laboratory analytical data, are presented as **Figures 4** and **5**, respectively. It is noted that arsenic concentrations of 0.0 μ g/L were assigned to the locations of FGD Pond EPA CCR Rule monitoring wells MW-FGD-02 through MW-FGD-05 and AS-FGD-01 through AS-FGD-03 in creating the isoconcentration contour map presented in **Figure 3** because arsenic



has historically not been detected in groundwater at those locations. As such, those monitoring wells serve to assist in establishing the up-gradient extent of arsenic in groundwater associated with the Ash Pond. Historical groundwater quality data for the FGD Pond EPA CCR Rule monitoring wells is presented in the August 2019 *Alternate Source Demonstration Report* for the Wateree Station FGD Pond. The configuration of the isoconcentration contours in **Figure 4** indicate that the highest concentrations of arsenic in shallow groundwater are present in a well-defined relatively narrow band within the broader plume which extends from northwest to southeast across the central part of the Ash Pond and becomes narrower as it approaches the vicinity of monitoring wells MW-AP-03 and MW-AP-11. The leading edge of the plume appears to extend laterally between the approximate locations of monitoring wells MW-AP-02 to MW-AP-04.

The configuration of the isoconcentration contours in **Figure 5** indicate that the extent of lithium in shallow groundwater in concentrations exceeding the GPS of 40 μ g/L is confined to a relatively small, well-defined area encompassing the approximate locations of monitoring wells MW-AP-03, MW-AP-10 and MW-AP-03/03D/03D2, and is located completely on the Wateree Station property. It is emphasized that concentrations of lithium in groundwater exceeding the GPS of 40 μ g/L were only detected in the groundwater samples collected from monitoring wells MW-AP-10 and MW-AP-11, indicating that the extent of lithium in groundwater exceeding the GPS is substantially restricted in aerial extent.

Graphs of total arsenic and lithium concentrations in groundwater versus time for samples collected from the aforementioned monitoring wells during the period of May 2016 to August 2019 are presented in **Appendix B**. The graph of total arsenic concentrations versus time shows an overall downward trend in arsenic concentrations in groundwater at GW-AP-03, which likely is a manifestation of the effects of source removal from the Ash Pond (i.e., coal ash and soil excavation and removal) associated with pond closure, as well as natural attenuation processes affecting arsenic concentration of arsenic detected in groundwater at MW-AP-03 in August 2019 is the lowest concentration detected in the last 2 1/2 years of monitoring (nine monitoring events). Slightly decreasing to relatively stable arsenic concentrations in groundwater are evident at monitoring wells MW-AP-02 and MW-AP-04, respectively, indicating probable dynamic equilibrium of the total arsenic plume at those locations. The graph of total lithium concentrations in lithium concentrations in groundwater at monitoring versus time shows downward trends in lithium concentrations in



groundwater at GW-AP-02, GW-AP-03 and GW-AP-08, which are likely manifestations of the effects of source material (coal ash and underlying soil) removal from the Ash Pond, as well as natural attenuation processes affecting lithium concentrations in groundwater at that location. It is anticipated that concentrations of arsenic and lithium in groundwater will begin to exhibit downward trends at all down gradient monitoring well locations following completion of coal ash and soil excavation and removal from the Ash Pond in September 2019.

The results of the August 2019 Assessment Monitoring event further support the conclusion that natural attenuation processes in the surficial aquifer are acting to reduce the concentrations of arsenic and lithium in groundwater. Consequently, as concluded in the June 2019 Assessment of Corrective Measures, further assessment of the potential applicability of Monitored Natural Attenuation (MNA) as a remedy to address arsenic and lithium in groundwater at and near the Ash Pond is warranted.

3.4 Monitored Natural Attenuation Assessment

Site studies (including the Release Characterization, ACM and multiple rounds of Detection and Assessment monitoring) indicate that the arsenic and lithium plumes in groundwater in the vicinity of the Ash Pond are in a state of dynamic equilibrium or decreasing in extent. Moreover, removal of the source material (coal ash and underlying 2 feet of soil) from the Ash Pond was completed in September 2019. The source material removal action, coupled with the apparent relative stability or attenuation of the arsenic and lithium plumes indicates that natural attenuation processes are likely sufficiently robust to effectively reduce the concentrations of arsenic and lithium in groundwater to below the respective groundwater protection standards (GPSs). Consequently, DESC currently considers MNA coupled with source removal (completed) to be the preferred remedial alternative to address arsenic and lithium in groundwater at the site. MNA to address inorganic contaminants (including metals and metalloids) in groundwater is a remedial option approved by the EPA if site conditions are amenable based on criteria published in applicable guidance documents.

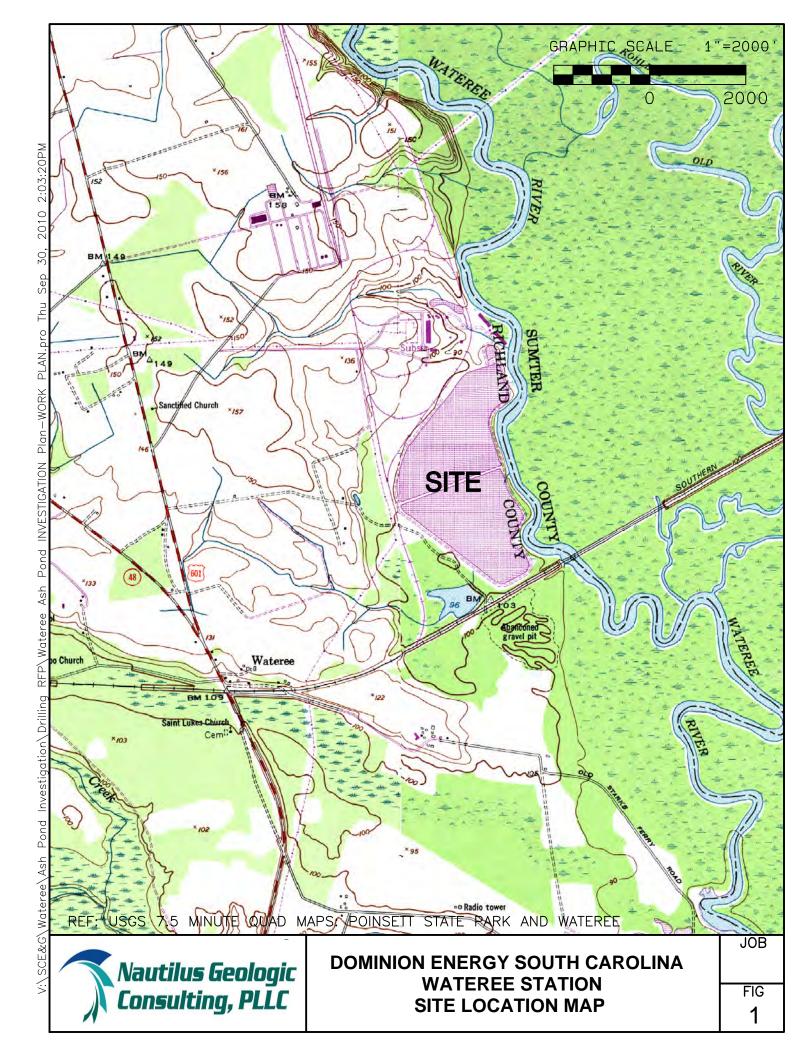
At present, there is insufficient site data available to meet all of the criteria for MNA as presented in the EPA guidance documents. Consequently, additional field and laboratory work are necessary to fill the data gaps. As such, DESC is currently developing a work plan to conduct the additional field and laboratory work and studies necessary to satisfy the EPA guidance criteria to demonstrate the effectiveness of MNA as a remedy to address elevated arsenic and lithium concentrations in groundwater at

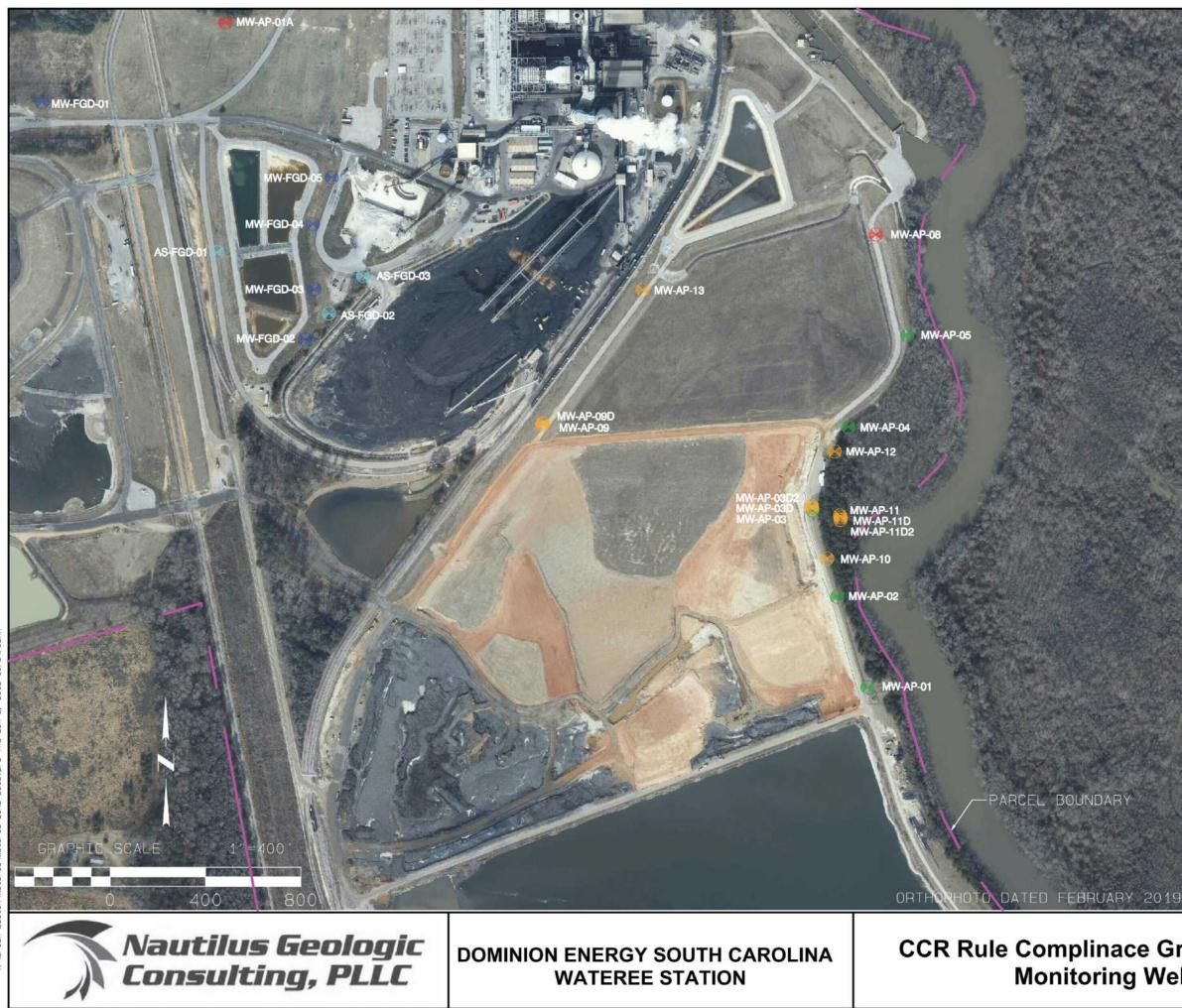


the Ash Pond. The scope of the additional work may broadly include some or all of the following:

- Installation of additional groundwater monitoring wells.
- Soil Sampling and Laboratory Analysis
 - Bulk elemental analysis
 - Grain size distribution
 - Arsenic adsorption/desorption testing
 - Sequential Chemical Extraction
 - X-Ray Diffraction
 - Scanning Electron Microscopy
- Groundwater Sampling and Analysis

At the conclusion of the field and laboratory work and studies, a report detailing the results of the MNA assessment will be prepared that presents the results of the supporting work and studies, as well as conclusions as to whether MNA meets the EPA guidance criteria for application as a remedy to address elevated concentrations of arsenic and lithium in groundwater. It is estimated that it will require 9 to 12 months to finalize the work plan and implement and complete the scope of work, including final report preparation. The final remedy will be selected after completion of the MNA assessment.





EPA CCR RULE COMPLIANCE GROUNDWATER MONITORING WELLS

FGD WASTEWATER POND

- Background and down gradient monitoring wells
- Additional background monitoring well

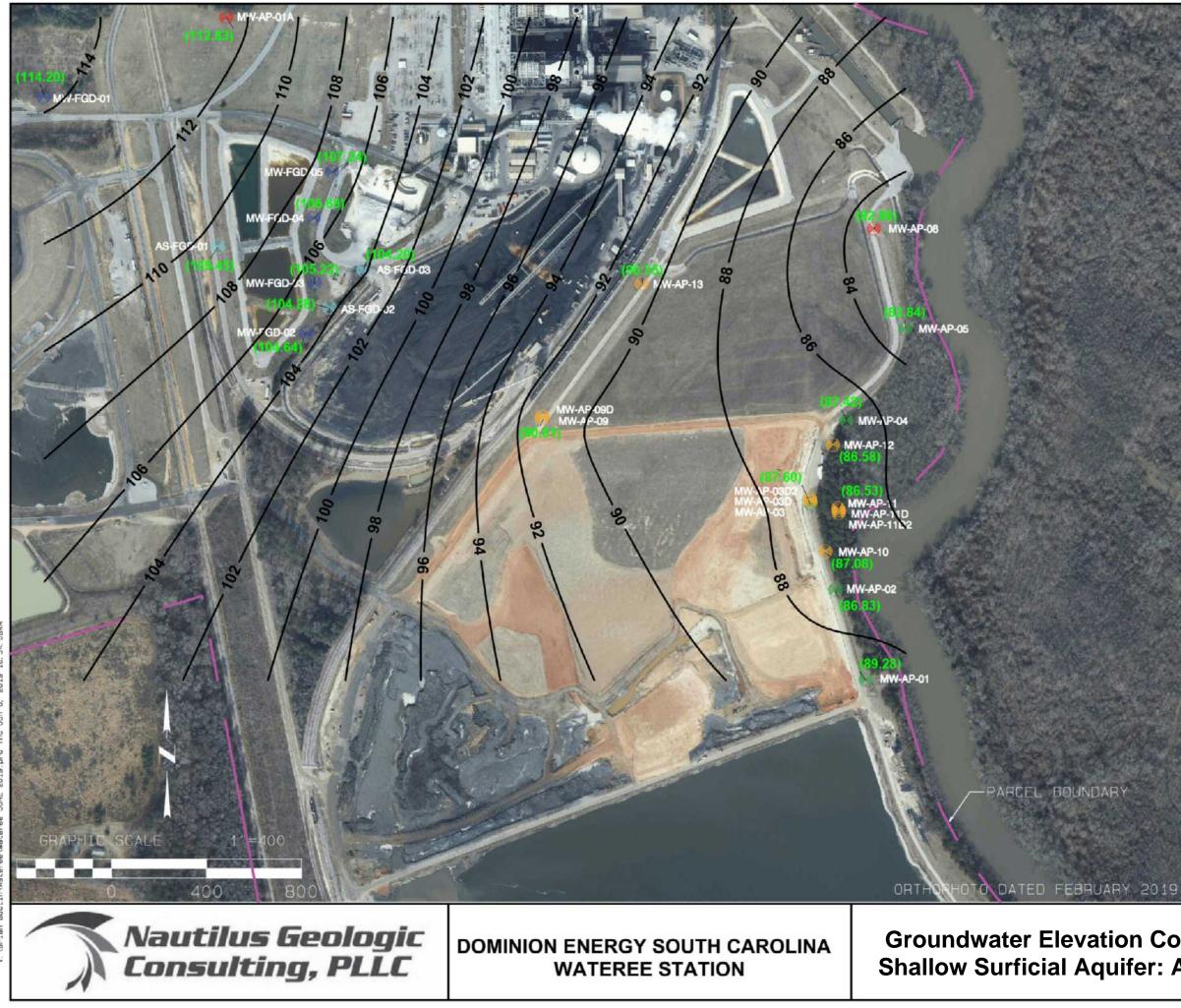
ASH POND

- Existing well used for background and down gradient water quality monitoring
- Well used for down gradient water quality monitoring
- e Release Characterization monitoring well

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SHEET





FGD WASTEWATER POND

- Background and down gradient monitoring wells 0
- Additional background monitoring well 0

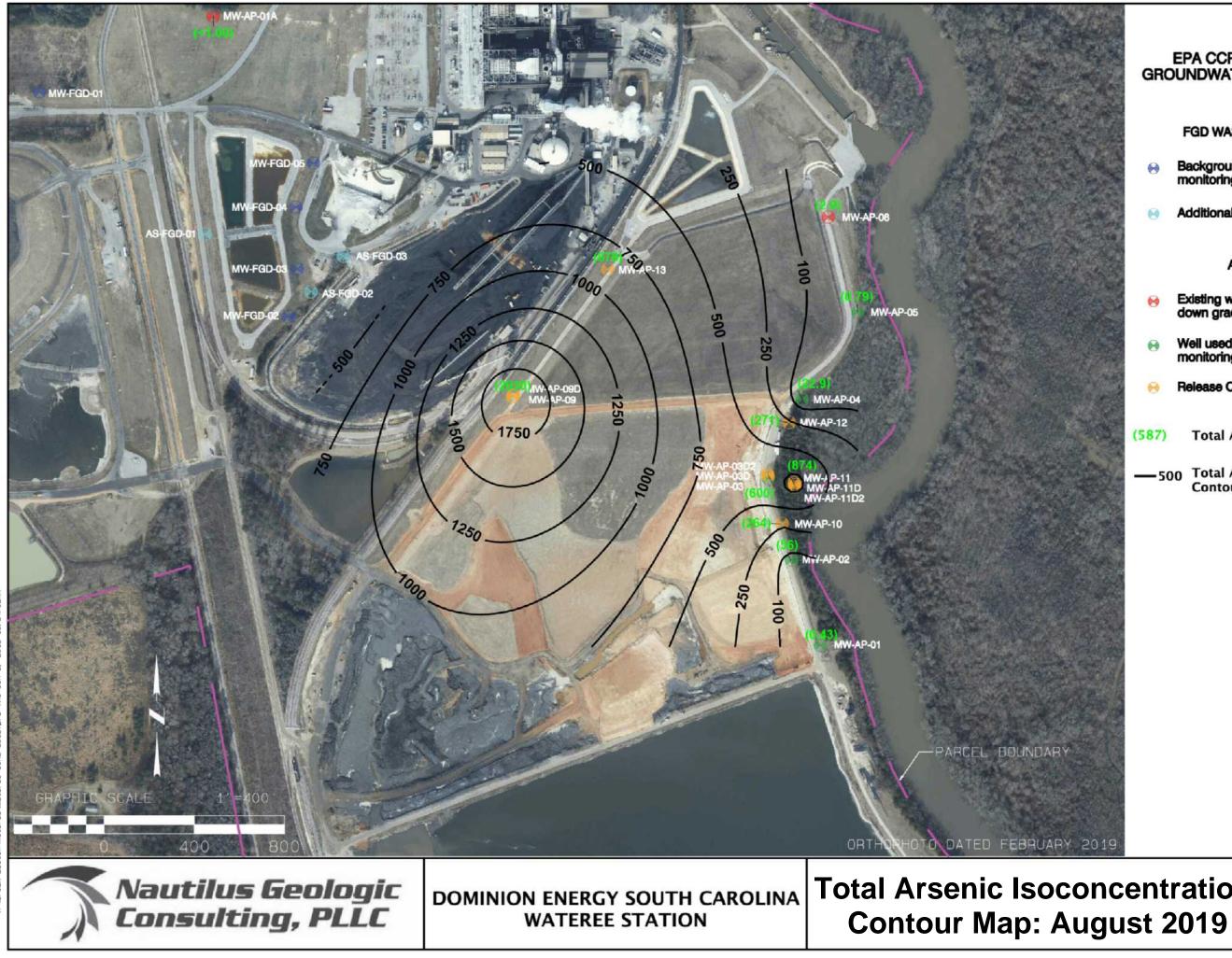
ASH POND

- Existing well used for background and down gradient water quality monitoring 0
- Well used for down gradient water quality 0 monitoring
- Release Characterization monitoring well 0
- (104.63) Groundwater Elevation (ft. MSL)
- 100 Groundwater Elevation Contour (ft. MSL)

Groundwater Elevation Contour Map: Shallow Surficial Aquifer: August 2019

JOB NUMBER

SHEET 3



EPA CCR RULE CO GROUNDWATER MONI	
FGD WASTEWATER	POND
Background and down monitoring wells	n gradient
Additional background	i monitoring well
ASH POND	
Existing well used for down gradient water of	background and juality monitoring
Hell used for down gr monitoring	adient water quality
😝 Release Characterizat	on monitoring well
(587) Total Arsenic Co	ncentration (ug/L)
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EPA CCR RULE CO GROUNDWATER MONIT	
FGD WASTEWATER	POND
Background and down monitoring wells	gradient
Additional background	monitoring well
ASH POND	
Existing well used for b down gradient water q	
Hell used for down gramonitoring	adient water quality
😣 Release Characterizate	on monitoring well
(16.3) Total Lithium Cor	centration (ug/L)
OUNDARY EBRUARY 2019	
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p: August 2019	SHEET
	5

Table 1 EPA CCR Rule Compliance Monitoring Well Construction Data and Specifications South Carolina Electric & Gas Wateree Station Ash Pond Eastover, Richland County, South Carolina

				Elevation Dat	а		Test Boring D	Data	Monitoring We	ell Construction	Data	
Monitoring Well	Boring	Northing	Easting	PVC Pipe	Ground	Stickup	Total	Bottom	Top of Well S	creen	Bottom of W	ell Screen
ID	Date	Northing	Easting	Elev.	Elev.	feet	Depth, ft.	Elevation	Depth, ft.	Elev.	Depth, ft.	Elev.
				-		_	_	-		-		
MW-AP-01A ¹	2/12/2010	725454.7	2113347	127.85	124.48	3.37	20.0	104.48	10.00	114.48	20.00	104.48
MW-AP-01	3/23/2016	722661.185	2116042.428	108.21	105.61	2.60	25.0	80.61	9.00	96.61	24.00	81.61
MW-AP-02	3/23/2016	723041.752	2115914.909	111.01	108.45	2.56	31.5	76.95	15.00	93.45	30.00	78.45
MW-AP-03	3/24/2016	723404.287	2115810.885	110.38	107.78	2.60	31.5	76.28	16.00	91.78	31.00	76.78
MW-AP-03D	12/5/2018	723413.593	2115810.374	110.61	107.98	2.63	48.0	59.98	38.00	69.98	48.00	59.98
MW-AP-03D2	2/21/2019	723423.757	2115809.097	110.68	107.68	3.00	70.0	37.68	60.00	47.68	70.00	37.68
MW-AP-04	3/24/2016	723755.232	2115961.707	99.02	96.49	2.53	24.0	72.49	6.00	90.49	21.00	75.49
MW-AP-05	3/24/2016	724141.607	2116209.66	106.04	103.45	2.59	38.0	65.45	21.50	81.95	36.50	66.95
MW-AP-08 ¹	7/25/1994	724563.489	2116078.084	109.49	106.35	3.14	44.0	62.35	24.00	82.35	44.00	62.35
MW-AP-09	11/29/2018	723765.094	2114676.468	112.48	109.65	2.83	30.0	79.65	20.00	89.65	30.00	79.65
MW-AP-09D	12/6/2018	723770.958	2114680.792	112.23	109.57	2.66	54.0	55.57	44.00	65.57	54.00	55.57
MW-AP-10	12/4/2018	723202.553	2115873.156	110.80	108.23	2.57	30.0	78.23	20.00	88.23	30.00	78.23
MW-AP-11	12/3/2018	723383.603	2115926.173	102.93	100.00	2.92	18.0	82.00	8.00	92.00	18.00	82.00
MW-AP-11D	12/4/2018	723374.828	2115930.574	102.98	100.03	2.95	38.0	62.03	28.00	72.03	38.00	62.03
MW-AP-11D2	2/20/2019	723365.56	2115929.465	103.90	99.68	4.22	60.0	39.68	50.00	49.68	60.00	39.68
MW-AP-12	12/5/2016	723651.848	2115905.049	106.06	103.18	2.88	29.0	74.18	19.00	84.18	29.00	74.18
MW-AP-13	2/21/2019	724330.57	2115097.858	109.91	107.03	2.88	28.0	79.03	18.00	89.03	28.00	79.03

NOTES:

1 - Existing monitoring wells; installed prior to March 2016 for use in groundwater monitoring under other regulatory programs but included in EPA CCR Rule compliance monitoring.

TABLE 2 IABLE 2 RESULTS OF FIELD AND LABORATORY ANALYSES OF GROUNDWATER SAMPLES EPA CCR RULE BACKGROUND AND COMPLIANCE GROUNDWATER MONITORING WELLS Wateree Generating Station Ash Pond Eastover, Richland County, South Carolina

	1						1						Eastove	er, Richlar	d County,	South Card	lina													
	Gro	oundwater	Monito	ring Indica	tor Parame	ters			40 CFR Detection	Part 257 Monitor											40 CFF Assessmen	R Part 257 It Monitor								
	Groundwater Elevation ft	ORP mV	DO mg/L	Specific conductance umhos/cm	Temperature degrees C	Turbidity NTU	рН (lab) S.U.	pH (field) S.U.	Boron ug/L BG	Calcium ug/L BG	Chloride mg/L BG	Fluoride mg/L BG	Sulfate mg/L BG	TDS mg/L BG	Antimony ug/L 6 ug/L	Arsenic ug/L 10 ug/L	Barium ug/L 2000 ug/L	Beryllium ug/L 4 ug/L	Cadmium ug/L 5 ug/L	Chromium ug/L 100 ug/L	Cobalt ug/L 6 ug/L	Lead ug/L 15 ug/L	Lithium ug/L 40 ug/L	Mercury ug/L 2 ug/L	Molybdenum ug/L 100 ug/L	Radium 226 pCi/L 5 pCi/L	Radium 228 pCi/L 5 pCi/L	Radium 226 + 228 pCi/L 5 pCi/L	Selenium ug/L 50 ug/L	Thallium ug/L 2 ug/L
Wateree Ash Pond MW-AP-01A					1		1	1										1	1	1						1				
5/11/1	6 115.56 6 114.06	198.5 167.2	3.4 5.57	51 55	20.89 24.41	0.7	4.82 5.93	4.74 4.63	<1,000 <1,000	781 781	5.64 5.4	<0.033 <0.033	<0.5 <0.5	32 27	<1.0 <1.0	<1.0 <1.0	55.8 56.5	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	1.2 1.4	<2.0 <2.0	<0.2 <0.2	<5.0 <5.0	1.15 0.915	1.93 0.568	3.08 1.483	<5.0 <5.0	<1.0 <1.0
9/19/1	6 114.19 6 113.69	179.4 293	5.21 3.97	47 58	25.61	1 1.3	5.8	4.45	<1,000 <1,000 <1,000	721	5.35 5.41	0.0597	<0.5 <0.5 <0.5	37	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	53.7 55.5	<2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0 <1.0	1.5	<3.0 <2.0	<0.2 <0.2	<5.0 <1.0	0.536	<1.56 3.42	0.536	<5.0 <5.0	<1.0 <1.0
1/17/1	7 115.37	172.7	4.11	42	19.27	2.18	4.72	4.63	<1,000	678	4.93	0.0492	0.83	36	<1.0	1.2	54.1	<2.0	<1.0	<1.0	<1.0	1.3	<2.0	<0.2	<1.0	0.859	2.51	3.369	<5.0	<1.0
3/20/1 5/22/1	7 114.19	174 198.8	4.6 4.95	40 68	18.68 22.1	9.5 2.72	5.5 4.65	4.45 4.98	<1,000 <1,000	1,510 677	4.77 4.6	<0.033 <0.033	<0.5 <0.5	26 32	<1.0 <1.0	<1.0 <1.0	56 53.2	<2.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	1.6 1.11	<2.0 <2.0	<0.2 <0.2	<1.0 <1.0	0.664 <0.314	0.979 <1.54	1.643 <1.854	<5.0 <5.0	<1.0 <1.0
7/10/1	7 113.93	225.4 253.9	2.64 5.39	53 40	21.61 21.53	1.5 5.1	4.73 5.43	4.32 4.55	<1,000 <1,000	700 511	5.37 4.97	0.0398	<0.5 <0.5	33 27	<1.0	<2.0	54.9	<2.0	<1.0	<2.0	<2.0	1.2	<2.0	<0.2	<1.0	1.63	1.85	3.48	<10.0	<1.0
3/5/1	8 113.21	372.2 335	3.83 4.54	46 45	15.37 21.54	2.3 2.65	4.98 4.77	4.44 4.09	<1,000 <500	557 520	5.02 4.84	<0.2 <0.2	<0.5 <0.5	32 32	<1.0 <1.0	<1.0 <1.0	49.4 46.9	<2.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 0.70 J	1	<2.0 1.10 J	<0.2 <0.2	<1.0 <1.0	<0.513 0.914	1.61 1.34	1.61 2.254	<5.0 <5.0	<1.0 <0.5
9/10/1	8 113.23 8 114.60	386.7 171.9	3.72 4.84	57 51	25.81 21.74	2.1 4.65	5.31	4.57 4.53	<21.9 <50.0	514 5,000	5.36 6	<0.025 <0.1	<0.129 <1.0	31 27	<0.09	<0.292	50.6	<0.285	<0.035	<0.345	0.34	1.2	1.3	<0.071	<0.111	<0.622	<1.22	<1.842	<2.06	<0.071
12/11/1 3/6/1	8 115.25 9 116.26	185.5 195.2	4.68 4.93	57 50	13.12 12.11	2.4	4.88	4.24 4.38	<38.5 <200	625 648	5.61 5.49	<0.008 <0.1	0.93 <0.5	42 37	<1.0	<0.292 <1.0	54.8	<2.0	<1.0	<1.0	<1.0	1.1	1.4 <2.0	<0.2	<1.0	0.684	<1.91	0.684	<5.0	<0.5
8/28/1 MW-AP-01	9 112.83	243.4	3.71	44	16.64	1.4	4.88	3.89	58.50 J	529	5.25	<0.10	<0.50	43	<1.0	<1.0	48.3	0.17 J	<1.0	<1.0	0.59 J	1.28	1.30 J	<0.2	<1.0	0.883	<1.34	0.883	<5.0	<0.5
<u> </u>	6 89.46 6 87.68	-85.1 -123.7	0.36	655 583	20.84 22	1.1 5.3	6.435 6.78	6.17 6.62	<1,000 <1,000	39,100 41,800	112 130	0.3355	1.34 1.8	331.5 353.75	<1.0 <1.0	<1.0 <1.0	180 184	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	< <u>5.0</u> 5.05	1.6 0.8365	1.186 1.54	2.786 2.3765	<5.0 <5.0	<1.0 <1.0
9/19/1 11/16/1	6 87.86 5 87.37	-100.5 -72	0.08	705 801	23 20.99	0.6 4.2	6.7 6.73	6.53 6.97	1,250 1,330	47,800 48,500	148.5 157	0.363 0.334	9.2 8.626	405 412	<1.0 <1.0	<1.0 <1.0	209 215	<2.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	6.4 5.6	1.44 0.754	<2.27 <1.36	1.44 0.754	<5.0 <5.0	<1.0 <1.0
1/18/1	7 88.65 7 87.96	-117.5	0.38	734 719	22.25	3.22	6.75 5.64	6.69 6.55	1,380 1,480	52,700 53,600	167 164	0.372	6.62 5.52	399 441	<1.0 <1.0	1.4	229 218	<2.0	<1.0 <1.0	2.9	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	5.7	< <u>0.446</u> 0.447	<1.5 0.628	<1.946 1.075	<5.0 <5.0	<1.0 <1.0
5/23/1	7 89.57 7 88.61	-104.2	1.14	779	20.54	1.77 6.82	6.73 6.58	6.55 6.25	1,422	57,180 52,450	168 187	0.351 0.34	3.7	433 442	<1.0 <1.0	<1.0 <1.0	236 214	<2.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <1.0	<2.0 <2.0	<0.2 <0.2	4.4	0.761 2.36	<1.94 <1.07	0.761 2.36	<5.0 <5.0	<1.0 <1.0
9/26/1	7 87.83 8 89.65	-122 -82.5	0.81 0.21	784	21.9 17.54	2.2	6.73 7.01	6.71 6.71	1,900 2,080	59,700 67,000	195 224	0.311	11.1 <1.0	473	<1.0	<1.0	263	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	4.1	0.982	<1.57	0.982	<5.0	<1.0
6/5/1	8 91.19 8 87.67	28.1	0.4	1025	20.95	3.57	6.8 6.67	6.51 6.59	2,032	73,000	75.9	0.43	<0.5 7.26	525 587 709	<1.0	<1.0 <1.0 <0.292	203 291 281	<2.0	<1.0 <1.0 <0.035	<1.0 <1.0 <0.345	<1.0	<1.0 <1.0 <0.102	<2.0	<0.2 <0.071	4.1	0.4	<1.68	0.4	<5.0 <2.06	<0.5
12/11/1	8 91.56 9 91.35	14.31	1.52	1118	13.39	1.54	6.94	6.08	2,224	74,840	216	0.37	<0.387	674 561		0.38		<2.0		<1.0	<1.0		0.758	<0.2	3.1	0.77		0.72	<5.0	<0.5
3/6/1	9 91.35	35.2 -105.6	0.27	882 1014	13.8 22.1	9.7 2.1	6.67	6.55 6.72	2,320 2,260	78,900 68,900	223 255	0.35 <0.30	<1.5 1.94	603	<1.0 <1.0	0.43 J	309 267	<2.0	<1.0 <1.0	<1.0 0.49 J	<1.0 0.08 J	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	3.1 3.5	1.12	<1.33 <1.48	1.12	<5.0 <5.0	<0.5 <0.5
MW-AP-02 5/11/1	6 87.65	-55.5	0.17	638	22.2	9.1	6.38	5.95	<1,000	59,100	43.6	0.293	47.1	361	<1.0	119	191	<1.0	<1.0	<1.0	1.3	<1.0	16.5	<0.2	35.1	1.83	1.09	2.92	<5.0	<1.0
7/11/1 9/19/1	6 85.07 6 84.63	-83.7 -97.1	0.39 0.25	607 664	25.8 28.79	8.6 7.05	6.62 6.6	6.42 6.5	<1,000 <1,000	70,700 71,100	41 67.2	0.32 0.372	48 48.4	375 367	<1.0 <1.0	206 280	204 179	<1.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	17.7 19.8	<0.2 <0.2	46.9 57.1	1.05 1.16	3.32 <1.68	4.37 1.16	<5.0 <5.0	<1.0 <1.0
<u>11/15/1</u> 1/18/1	6 84.01 7 85.70	-40 -104.2	0.48	749 653	19.19 22.28	7.2 6.15	6.7 6.56	6.88 6.46	1,020 1,000	66,200 64,700	105 100	0.391 0.43	51.979 39	419 432	<1.0 <1.0	330 166	166 170	<2.0 <2.0	<1.0 <1.0	<1.0 1.1	<1.0 <1.0	<1.0 <1.0	21.3 23.7	<0.2 <0.2	51.2 30	0.608	<1.70 <1.59	0.608	<5.0 <5.0	<1.0 <1.0
3/21/1	7 84.91 7 88.78	-88 -23	0.48	639 592	22.29 20.3	5.8 9.82	5.5 6.27	6.33 6.11	1,340 <1,000	61,100 53,230	125.2 91.1	0.372 0.269	28.9 23.5	420 341	<1.0 <1.0	298 39.4	194 184	<2.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	37.9 9.79	<0.2 <0.2	25.2 5.2	0.556	0.818 <1.29	1.374 0.517	<5.0 <5.0	<1.0 <1.0
7/10/1	7 86.18 7 84.93	-59.3 -52.3	0.62	575 645	25.44 18.59	2.97 3	6.32 6.59	5.99 6.44	<1,000 1,070	40,300 63,000	57.76 104	0.199 0.334	8.6 41.4	313 407	<1.0	48.7	185	<2.0	<1.0	<1.0	<1.0	<1.0	6.46	<0.2	7.2	0.943	<0.968	0.943	<5.0	<1.0
3/5/1 6/5/1	8 88.00 8 90.26	-53.8 23.2	0.28	404 846	16.89 21.39	4.3 3.84	6.69 6.63	6.34 6.33	1,690 1,649	68,000 70,310	173 83.1	<0.4 0.41	44 24	460 525	<1.0 <1.0	278 243	234 244	<2.0 <2.0	<1.0 <1.0	<1.0 0.50 J	<1.0 0.96 J	<1.0 <1.0	29.1 35.2	<0.2 <0.2	28.7 31.1	0.915 0.685	1.5 2.17	0.915 2.855	<5.0 <5.0	<1.0 <0.5
9/10/1	8 85.10 8 91.39	-50.3 145.6	1.07 0.8	600 911	22.18 13.43	4.3 2.08	6.42	6.03 5.74	798 1,705	42,700 71,060	64.1 156	0.21	7.37 44.9	382 597	0.13	85.4 208	189	<0.285	<0.035	<0.345	0.27	0.15	4.6 23.5	<0.071	4.7	<0.537	<1.15	<1.687	<2.06	<0.071
3/6/1	9 91.24 9 86.83	-11.8 72.4	0.54 3.51	638 732	11.67 17.62	5.5 3.9	6.68 6.58	6.45 6.15	1,330 595	59,500 44,500	114 38.7	0.34 0.18	37.6 <0.50	457 340	<1.0 <1.0	192 55.8	225 183	<2.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	12.7 2	<0.2 <0.2	18.5 7.6	0.428	1.22 <2.15	1.648 2.15	<5.0 <5.0	<0.5 <0.5
MW-AP-03 5/11/1	5 88.78	-95	0.22	603	22.64	4.1	6.63	6.26	1,020	73,900	19.5	0.745	66.9	353	<1.0	0	133	<1.0	<1.0	<1.0	<1.0	<1.0	91.5	<0.2	28.1	2	-0.0212	1.9788	<5.0	<1.0
7/11/1	6 86.90 6 86.48	-96.6 -68	0.29	411.8 522	24 21.85	6.9 7.86	6.9 6.7	6.58 6.2	<1,000 1,080	57,000	18 20.5	0.904	53 55.3	281 312	<1.0 <1.0	1120 1170	103 122	<1.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	81.3 82.5	<0.2 <0.2	27.3	0.244	-0.235 <1.65	0.009	<5.0 <5.0	<1.0 <1.0
11/15/1	6 85.58 7 86.61	-56 -107.6	0.51	565	18.99 20.81	7.4	6.76 6.57	7.01	1,000	61,600	20.7	0.759	55.4 31.4	320	<1.0	1340	120	<2.0	<1.0	<1.0	<1.0	<1.0	80	<0.2	19.9	1.02	<1.76	1.02	<5.0	<1.0
3/21/1	7 85.56 7 88.20	-107.0 -105.8 -87.1	0.31	577	22.71 19.36	8.1	5.62	6.73	1,030	72,500	29.1	0.673	72.9	396 392 405	<1.0 <1.0 <1.0	1400 1809	150 182	<2.0	<1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	98.1	<0.2 <0.2 <0.2	16.4	0.997	0.614	1.611	<5.0 <5.0	<1.0
7/10/1	7 87.16	-70.5	0.25	657	22.48	4.32	6.54	6.1	1,035 <1,000	67,660	57.07	0.518	58.29	397	<1.0	1809	182	<2.0	<1.0 <1.0	<1.0	<1.0	<1.0	101 61.6	<0.2	19.6 12.1	1.57	<1.16	1.57	<5.0	<1.0 <1.0
9/26/1 3/5/1	7 86.67 8 88.08	-63.9 -75.3	0.17		18.54 16.93	2.6	6.66 6.96	6.35 6.57	<1,000 1,350		77.8	0.674 <0.4	69.2 84.1	402 414	<1.0	1290	164	<2.0	<1.0	<1.0	<1.0	<1.0	96.2	<0.2	19.3	1.42	<1.69	1.42	<5.0	<1.0
6/5/1 9/10/1	8 86.17	0.5	0.24	754 563	21.18 21.26	2.93 2.1	6.75 6.56	6.46 6.16	1,462 1,080	58,500	60.2 68.5	0.78	44.6 51.3	474 409	<1.0 <0.09	1252 943	182 165	<1.0 <0.285	<1.0 <0.035	0.38 J <0.345	0.35 J 0.18	0.11 J 0.102	109 53.2	<0.2 <0.071	18.7 11	1.07 0.849	1.64 <1.07	2.71 0.849	<5.0 <2.06	<0.5 <0.071
12/11/1 3/7/1	8 91.53 9 91.62	130.7 -25.1		836 665	14.32 14.03	5.83 4.2	6.81	6.04 6.65	1,550 1,840		128 146	0.79	72.8 86.7	513 542	<1.0	1050 1240	191	<2.0	<1.0	<1.0	<1.0	<1.0	97.8 87.2	<0.2	16.7	1.49	<1.82	1.49	<5.0	<0.5
8/27/1 MW-AP-3D	9 87.60	13.2	0.17	650	18.85	5.4	6.46	6.06	937		73.2	0.42	68.8	466	<1.0	600	188	<2.0	<1.0	0.45 J	0.18 J	0.11 J	32.7	<0.2	10.4	1.64	<2.12	1.64	<5.0	<0.5
<u>12/11/1</u> 3/7/1	90.76 9 90.91	132.3 47.7	0.36	510 378	12.52 15.61	7.45 8.9	6.67	6.16 5.98	675 903	47,300	21.3 21.9	0.62	94.4 87.3	317 282	0.13 <0.09	507 1050	92.4 69.5	<0.299 <0.299	<0.042 <0.035	0.98 <0.345	2.3 3.3	0.33 0.234	4.9 5.1	<0.071 <0.071	79.1 28.5	0.854	3.48	4.334	<2.06 <2.06	<0.071 0.083
8/27/1 MW-AP-3D2	9 84.41	75.4	0.24	333	17.65	3.6	6.31	5.69	775	35,100	23.9	0.23	85.3	231	<1.0	971	54.1	<2.0	<1.0	<1.0	3.7	<1.0	5	<0.2	21.8	0.98	4.61	5.59	<5.0	0.12 J
3/29/1 8/28/1	9 92.06 9 88.13	139 285.6	3.04 2.85	259 241.1	20.71 22.7	8.59 5.01	6.15 5.97	5.49 5.44	394 600	9,870 11,500	14.4 18.3	0.11 <0.10	57.5 70	137 120	0.41 J <1.0	0.53 J 0.35 J	48.5 45.8	1.10 J 1.20 J	0.10 J 0.21 J	0.52 J <1.0	7.3 11.8	1.9 0.26 J	13.5 13.4	<0.2 <0.2	1.6 0.18 J	0.335	<1.33	0.335	<5.0 <5.0	0.37 J <0.5
MW-AP-04 5/11/1	6 88.65	-60.5	0.17	770	22.17	8.1	6.61	6.05	2,180	98,400	16.8	0.262	1.17	408	<1.0	11.4	166	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<5.0	1.22	3.14	4.36	<5.0	<1.0
7/11/1	6 85.66 6 86.61	-50 -54.4	0.4	701 749	23.68 23.45	0.95	6.65 6.6	6.34 6.49	2,410 2,590	108,000	17 17.5	0.365	1.1 <0.5	422 428	<1.0 <1.0	7.1 6.1	146 149	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	<5.0 <5.0	1 1.57	0.783 <1.48	1.783 1.57	<5.0 <5.0	<1.0 <1.0
11/15/1 1/18/1	6 85.22 7 86.21	-41 -114.7	0.45	827 778	19.86 18.95	6.1 7.54	6.68 6.46	6.82 6.53	2,630	115,000 12,500	16.8 12.26	0.357	<0.5 <0.5	432 471	<1.0 <1.0	8	159 215	<1.0 <2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	<1.0 <1.0	1.59	<1.52 <2.56	1.59	<5.0 <5.0	<1.0 <1.0
3/21/1	7 85.28 7 87.36	-102.1	0.7	687 766	22.11	0.9	5.54	6.65 5.98	1,440	92,100	9.16	0.187	<0.5 <0.5	362 432	<1.0 <1.0	81.4	194 234	<2.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	<1.0 <1.0	1.33	1.15	2.48	<5.0 <5.0	<1.0 <1.0
7/10/1	7 86.51 7 86.22	-89.7	0.39	807	24.08 18.55	6.23 6.4	6.51 6.78	6.26 6.54	1,583		10.2 11.66 15.8	0.195 0.188 0.286	<0.5 <0.5 0.67	432 446 389	<1.0	69.1	234	<2.0	<1.0 <1.0 <1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<1.0	1.88	<1.52	1.88	<5.0	<1.0
3/6/1	8 88.13	-28.2	1.23	809	11.52	9.1	6.75	6.49	2,050	104,000	15.5	0.99	<0.5	424	<1.0	29.6	198	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0 <2.0	<0.2	1	1.15	1.59	1.15	<5.0	<1.0 <0.5
6/5/1 9/10/1	8 89.90 8 86.42	30.4 -8.8	1.39	775 698	22.83 26.63	9.7 2.2	6.59 6.64	6.35 6.53	2,100	100,200 95,400	13.1 15	0.22	<0.5 <0.129	448 443	<1.0 <0.09	43 49.1	206 204	<2.0 <0.285	<1.0 <0.035	0.65 <0.345	0.10 J 0.12	0.20 J <0.102	0.19 J	<0.2 <0.071	0.29 J 0.24	0.704 0.583	1.854 1.39	2.558 1.973	<5.0 <2.06	<0.5 <0.071
<u>12/11/1</u> 3/11/1	8 91.10 9 90.61	-40.2 -26	0.3	717 473	10.46 14.35	28.1 15.3	6.67	6.28 6.47	1,514 2,310	104,000	11 14.8	0.18	<0.129 <0.129	418 408	<0.09	45 21.6	185	<0.299	<0.035	0.513	0.098	<0.102	<0.758 <0.758	<0.071	0.198	<0.693	<1.15	<1.843	<2.06	<0.071
8/28/1	9 87.42	-67.4	0.52	824	25.4	6.32	6.65	6.4	2,560	117,000	17.2	0.27	<0.50	439	<1.0	22.9	196	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<1.0	0.971	<1.96	0.971	<5.0	<0.5

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	Gro	undwater	Monito	ring Indicat	or Paramet	ters			40 CFR Detection	Part 257 Monitori											40 CFF Assessmer	R Part 257 It Monitor	••							
	Groundwater Elevation ft	ORP mV	DO mg/L	Specific conductance u mhos/cm	Temperature degrees C	Turbidity NTU	pH (lab) S.U.	pH (field) S.U.	Boron ug/L BG	Calcium ug/L BG	Chloride mg/L BG	Fluoride mg/L BG	Sulfate mg/L BG	TDS mg/L BG	Antimony ug/L 6 ug/L	Arsenic ug/L 10 ug/L	Barium ug/L 2000 ug/L	Beryllium ug/L 4 ug/L	Cadmium ug/L 5 ug/L	Chromium ug/L 100 ug/L	Cobalt ug/L 6 ug/L	Lead ug/L 15 ug/L	Lithium ug/L 40 ug/L	Mercury ug/L 2 ug/L	Molybdenum ug/L 100 ug/L	Radium 226 pCi/L 5 pCi/L	Radium 228 pCi/L 5 pCi/L	Radium 226 + 228 pCi/L 5 pCi/L	Selenium ug/L 50 ug/L	Thallium ug/L 2 ug/L
MW-AP-05 5/11/16	84.98	-27.4	0.29	510	23.75	3.1	6.03	6.06	<1,000	13,100	18.9	0.0924	23.3	325	<1.0	1.6	224	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<5.0	6.17	0.728	6.898	<5.0	<1.0
7/11/16	82.42	-19.3	0.51	424	23.88	9.87	6.19	5.74	<1,000	12,200	19	0.0812	4.8	238	<1.0	1.4	192	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<5.0	1.41	1.9	3.31	<5.0	<1.0
9/19/16	81.35 80.08	-15.2 -9	0.18	433 456	22.77 19.85	9.4 6.9	6.1 6.32	6.05 6.45	<1,000 <1,000	12,600 12,300	19.5 19.6	0.0627	3.22 0.934	252.5 250	<1.0 <1.0	1.9 2.3	199 184	<2.0 <2.0	<1.0 <1.0	<1.0 <1.0	2.3 1.3	<1.0 <1.0	<2.0 <2.0	<0.2 <0.2	<5.0 <1.0	0.896	<2.02 1.56	0.896	<5.0 <5.0	<1.0 <1.0
1/18/17	82.29	-26.7	0.38	498	19.41	7	6.15	5.81	<1,000	12,700	19.78	0.0607	<0.5	240	<1.0	2.2	218	<2.0	<1.0	<1.0	<1.0	<1.0	<2.0	<0.2	<1.0	0.82	<1.51	0.82	<5.0	<1.0
3/21/17	82.85 86.66	-66.4 -63.9	1.03	428 503	18.4 18.41	7.2	5.4 6.17	6.09 5.89	<1,000 <1.000	12,500 12,200	18.2 17.9	0.0659	<0.5 <0.5	258 283	<1.0 <1.0	1.2	201 199	<2.0 <2.0	<1.0 <1.0	1.2 1.01	<1.0 <1.0	<1.0 <1.0	0.0659 <2.0	<0.2 <0.2	<1.0 <1.0	0.519 <0.315	0.599	1.118 <1.525	<5.0 <5.0	<1.0 <1.0
7/6/17	86.93	-18.9	0.55	448	19.22	8.1	6.28	5.99	<1,000	12,200	19.74	0.0824	11.32	246	<1.0	<1.4	199	<2.0	<1.0	1.01	<1.0	<1.0	<2.0	<0.2	<1.0	1.03	<1.08	1.03	<5.0	<1.0
9/26/17	82.09	-60.9	0.72	430	17.63	6.4	6.28	6.12	<1,000	12,600	19.5	0.076	1.35	279																
3/6/18	86.76 91.10	-26.2 97.4	0.66	476	13.43 20.86	9.5 8.61	6.43 6.17	6.09 5.64	<1,000 142 J	10,900 10,870	20.4	<0.2 <0.2	<0.5 35.5	258 281	<1.0 <1.0	1.4 0.89 J	183 195	<2.0 <2.0	<1.0 <1.0	<1.0 1	<1.0 0.97 J	<1.0 0.30 J	<2.0 1.50 J	<0.2 <0.2	<1.0 0.12 J	0.745	<1.48 <1.89	0.745	<5.0 <5.0	<1.0 <0.5
9/10/18	82.46	-44.1	0.29	583	18.95	7.2	6.24	5.39	118	11,700	19.1	<0.025	0.65	298	<0.09	1.3	192	<0.285	<0.035	<0.345	0.81	<0.102	0.36	<0.071	0.11 J	<0.661	<1.14	<1.801	<2.06	<0.071
12/11/18	91.25 91.19	49 26.8	0.75	400 314	12.2 15.7	5.8 2.5	6.14	5.75 5.89	183	10,870 11,100	18.8 19.7	<0.008	20.3 19.9	262 264	<0.00	1.2 0.79	187	<0.200	<0.035	<0.345	0.964	<0.102	1.1 1.3	<0.071	<0.111	0.619	<1.65	0.619	<2.06	<0.071
8/28/19	82.84	-65	0.4	494	27.1	3.1	6.14	6.12	316 186 J	11,100	19.7	<0.008 <0.10	23.4	264	<0.09 <1.0	0.79 J	224	<0.299 <2.0	<1.0	0.69 J	0.964 0.57 J	<0.102	<2.0	0.52	<1.0	0.919	<2.14	0.919	<2.06 <5.0	<0.071
MW-AP-08																														
5/11/16	85.28 82.61	-10.2 -1.1	0.14	537 467.7	22.31 23	50 20.6	5.95 6.01	6.02 5.68	<1,000 <1,000	21,700 21,900	18.1 17	0.475 0.418	118 109	382 385	<1.0 <1.0	4.5 6.3	152 171	3 5.8	<1.0 <1.0	1.2 2.3	19.5 20.1	<1.0 <1.0	13.8 12.1	<0.2 <0.2	<5.0 <5.0	0.765	2.28 0.561	3.045 2.951	< <u>5.0</u> 20.8	<1.0 <1.0
9/19/16	81.64	-19.5	0.46	556	26.83	20.1	6.2	5.88	<1,000	16,200	18.5	0.274	53.7	361	<1.0	1.8	198	2	<1.0	1.1	2.2	<1.0	3.09	<0.2	<5.0	0.804	2.6	0.804	5.4	<1.0
11/15/16	80.29 83.04	13 7.9	0.37	581 528	19.51 20.34	1.9 5.3	5.05 6.05	6.05 5.77	<1,000 <1,000	23,400 21,300	5.14 17.78	0.332 0.372	<0.5 95.3	380 357	<1.0 <1.0	8.6 7.6	137 167	3.5 3.8	<1.0 <1.0	<1.0 <1.0	24.3 12.9	<1.0 <1.0	14.2 9.86	<0.2 <0.2	<1.0 <1.0	1.34 0.866	2.3 2.37	3.64 3.236	18.5 19.3	<1.0 <1.0
3/21/17	83.04	-50.5	1.67	475	18.23	6.2	5.5	5.89	<1,000	20,600	17.78	0.311	106	362	<1.0	5.6	167	3.7	<1.0	1.2	14.2	<1.0	9.86	<0.2	<1.0	0.866	1.24	1.847	19.5	<1.0
5/22/17	86.78	-44.1	0.4	555	18.73	6.8	5.93	5.69	<1,000	23,290	15.8	0.412	135	377	<1.0 <1.0	7.6	136	3.6	<1.0	1.01	19.8	<1.0	14.4	<0.2	<1.0	1.31	<1.41	1.31	31.9	<1.0
//6/1/ 9/26/17	86.97 82.26	8.6 -49.3	0.64	511 483	19.11 19.37	6.9 6.8	6.11 6.14	5.58 5.95	<1,000 <1.000	21,700 20,400	18.45 18.3	0.304 0.306	105 93	347 374	<1.0	4.6	145	2.6	<1.0	1.5	14.9	<1.0	10.3	<0.2	<1.0	17.6	<1.26	17.6	11.4	<1.0
3./6/18	86.90	-4	0.3	515	15.06	4.6	6.24	6.07	<1,000	17,600	17.1	<0.2	56.7	301	<1.0	2.4	156	<2.0	<1.0	<1.0	8.5	<1.0	7.8	<0.2	<1.0	<0.55	<1.28	<1.83	5	<1.0
6/4/18 9/10/18	91.48 82.17	35.1 3.1	0.44	485 653	23.11 18.58	5.87 3.8	6.25 6.15	5.85 5.45	164 J 180	15,150 15,000	18.4 19.2	0.35	20.3 30.5	343 389	<1.0 <0.09	2.1	171 179	1.30 J 0.85	<1.0 <0.035	0.96 J 0.68	1.7 2.8	0.17 J	4.6 2.9	<0.2 <0.071	<1.0 <0.111	0.772	<2.19 <1.12	0.772	4.90 J 6.7	<0.5 <0.071
12/11/18	91.39	34.6	0.43	543	14.35	5.4		5.96	165	13,100	17.9	0.3	6.15	354		1.3							2.1						0.7	
3/11/19	91.30 82.98	1 -61.7	0.54	353 558	14.97 24.5	9.5 8.51	6.3 6.13	6.16 6.13	200 200		17.9 20.3	0.29	15.7 36.4	328 292	<0.09 <1.0	1.3 2.9	194 224	0.43 0.73 J	<0.035 <1.0	0.532	0.396 1.70 J	<0.102 0.34 J	2.2	<0.071 <0.2	<0.111 0.19 J	0.981	<1.58 <1.61	0.981	<2.06 8.6	<0.071 <0.5
8/28/19 MW-AP-09	82.98	-61.7	0.14	558	24.5	8.51	6.13	6.13	200	17,300	20.3	0.61	36.4	292	<1.0	2.9	224	0.73 J	<1.0	1.3	1.70 J	0.34 J	2.4	<0.2	0.19 J	1.7	<1.61	1./	8.6	<0.5
12/11/18	94.36	-29.2	0.32	635	15.16	4.7		6.26	907	50,340	40.5	0.44	101	404	<0.09	1490	159	<0.299	<0.035	0.345	0.92	<0.102	10.6	<0.071	23.9				<2.06	<0.071
3/8/19 8/28/19	94.56 90.61	36.1 -11.7	0.63	468 311	14.02 16.51	7.7	6.58 6.29	6.38 6.07	949	47,100 57,100	46.2 42	0.59	110 152	402 403	<0.09 <1.0	1730 2030	144 180	<0.299 <2.0	<0.035 <1.0	<0.345 0.39 J	0.35 0.26 J	<0.102 <1.0	13.5 13.9	<0.071 <0.2	22.8 24.2	1.28 1.44	<1.74 1.58	1.28 3.02	<2.06 <5.0	<0.071 <0.5
MW-AP-09D		11.7	0.1	011		2.11	0.25	0.07	520			0.10			1210		100						10.0	-012	E IIE	1.11	1.50	5.02		
12/12/18	94.51 94.76	131.8 35.2	1.42	352 327	11.04 14.24	9.8 3.9	5.99	5.95 5.81	615 862	37,980 32,900	18 22.4	<0.008 <0.008	78.2 99.7	260 250	0.11	10.3 55.3	58.7 40	<0.299 <0.299	0.46	0.36 <0.345	25.7 18.2	0.32	11 3.1	<0.071 <0.071	1.6 0.323	1.24	3.52	4.76	<2.06 <2.06	0.49
8/28/19	90.36	60	0.87	230	14.24	5.3	5.71	5.3	931		18.6	<0.008	114	230	<1.0	38.3	38.6	<2.0	<1.0	<1.0	17.4	0.136 0.10 J	6.1	<0.2	0.48 J	2.53	1.57	4.76	5.7	0.427
MW-AP-10																														
<u>12/11/18</u> 3/7/19	91.15 91.17	140 55.4	0.84	797 611	12.75 11.52	5.54 9.7	6.68	5.85 6.4	1,940 1,960	63,220 66,700	116 149	0.59 0.54	81 61.2	463 466	<0.09 <1.0	358 411	185 200	<0.299 <2.0	<0.035 <1.0	<0.345 <1.0	2.2 2.4	<0.102 <1.0	63.5 58.2	<0.071 <0.2	32.3 20.7	<0.275	<1.32	<1.595	<2.06 <5.0	<0.071 <0.5
8/27/19	87.08	-62.7	0.07	746	23.8	9.98	6.6	6.42	1,430	60,200	134	0.48	49.2	468	<1.0	264	168	<2.0	<1.0	0.44 J	2	0.09 J	40.9	<0.2	17	1.39	<1.88	1.39	<5.0	<0.5
MW-AP-11 12/11/18	91.13	137.6	1.49	197	13.51	3.96		4.75	815	6,418	23	<0.008	41.4	137	<0.09	19.9	36.4	<0.299	<0.035	<0.345	0.71	0.15	2.7	<0.071	0.28		l		<2.06	<0.071
1/29/19	51.13	137.0	1.45	137	13.31				015	0,410					~0.05	777	50.4	-0.233	-0.033		0.71	0.15	2.1	\$0.071	0.20				~2.00	
3/7/19	91.24	59.2	0.59	454	13.29	8.3	6.43	5.84	1,220	46,100	89.1	0.34	63	330	<0.09	587	116	<0.299	<0.035	<0.345 0.40 J	0.93	<0.102	24.2	<0.071	9.8	0.895	1.87	2.765	<2.06	<0.071
8/2//19 MW-AP-11D	86.53	-64.6	0.32	770	23.3	5.54	6.55	6.59	1,720	75,000	128	0.82	68	463	<1.0	874	175	<2.0	<1.0	0.40 J	0.99 J	<1.0	84.7	<0.2	33.2	0.952	<1.40	0.952	<5.0	<0.5
12/12/18	90.88	79.5	0.38	355	13.04	7.4		5.63	666	34,280	16	<0.008	78.8	214	<0.09	304	79	<0.299	<0.035	0.36	6.7	0.24	7.9	<0.071	1.7				<2.06	0.19
1/29/19	90.88	80.3	2.87	258	14.15	2.8	6.26	5.72	684	30.800	16.6	<0.008	81.8	213	<0.09	522 334	70.3	<0.299	<0.035	<0.345	6.9	<0.102	7.9	<0.071	0.78	1.96	3.07	5.03	<2.06	0.19
8/27/19	84.05	191.5	0.25	257.4	22.7	4.88	6.35	5.66	548	26,000	16.1	<0.10	78.2	191	<1.0	222	70.3	0.48 J	0.04 J	<1.0	8.9	<1.0	14.6	<0.2	0.65 J	2.59	2.96	5.55	<5.0	0.19 0.22 J
MW-AP-11D2	93.20	00.5	0.66	150	13.43	2.0	5.74	5.45	103	3,560	10.6	10.000	31.1		0.16	2.5	74.9	0.735	0.035	<0.345		0.33	16.9	<0.071	0.67	1.1	2.02	2.12	<2.06	0.15
8/27/19	93.20 88.50	99.5 277.9	0.66	158 113.9	13.43 22.5	2.9 8.3	5.74	5.45	183 118 J	3,560	10.6	<0.008 <0.10	31.1 27.2	105 86	0.16 0.12 J	2.5 1.6	74.9	2.4	0.035 0.05 J	<0.345 0.55 J	3.1 5.8	0.33	16.9 17.5	<0.071 <0.2	0.67 0.14 J	1.1 1.99	3.13	2.12	<2.06	0.15 0.29 J
MW-AP-12																														
12/12/18	90.87 91.20	-36.6	0.44	505 369	12.46 13.95	4.47 3.7	7.01	6.07 6.78	1,190 1,700	70,310 82,000	12.1 39.9	1.04 2.49	106 194	320 363	<0.09 <0.09	225 255	140 145	<0.299 <0.299	<0.035 0.04	<0.345 <0.345	1.1 0.274	<0.102 <0.102	7.2	<0.071 <0.071	62.8 46.9	0.717	1.91	2.627	<2.06 <2.06	<0.071 <0.071
8/28/19	86.58	-56.6	0.22	303	15.38	2.4	6.97	6.56	1,740	93,000	22.2	1.51	79.9	162	<1.0	235	145	<2.0	0.04 J	<1.0	0.274 0.09 J	<1.0	12.7	<0.2	48.9	0.726	<2.06	0.726	<5.0	<0.071
MW-AP-13	94.59	53.7	0.45	428	14.16	1.1	6.1	5.76	441	36,400	22.4	0.47	179	453	<0.09	731	126	<0.299	<0.035	0.41	1.6	<0.102	16.3	<0.071	13.6	<0.636	<1.26	<1.896	<2.06	<0.071
3/8/19	94.59 90.55	53.7	0.45	428 285	14.16	1.1	6.1 5.97	5.76	441 467		22.4	< <u>0.47</u> <0.30	179	453	<0.09	878	93.5	<0.299	<0.035	0.41 <1.0	1.6 <1.0	<0.102	28.8	<0.071	13.6	0.979	<1.26	<1.896 0.979	<2.06	<0.071

Notes: Monitoring well locations highlighted in green are background monitoring locations. Monitoring well locations highlighted in orange are down gradient compliance monitoring locations. BG = Background; For those constituents for which a Maximum Contaminant Level (MCL) has not been established by the US EPA, detected concentrations in groundwater at compliance monitoring well locations are compared to concentrations detected in groundwater at background locations to determine if a statisticaly significant increase in concentrations above background levels is evident from the data. Results shown in blue indicate. the analyte was not detected above the indicated laboratory reporting limit (i.e., the value listed).



APPENDIX A

Results of Field and Laboratory Analyses of Groundwater Samples

State	Certification
Alaska	17–018
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122020-1
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	2019-013
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-19-15
Utah NELAP	SC000122019–28
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

List of current GEL Certifications as of 23 September 2019

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 489339 GEL Work Order: 489339

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Jake Crook.

Jack H Cirk

Reviewed by

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 23, 2019

	Company : Address :		. Engineering) Savage Road								
	Contact: Project:	Mr.	eleston, South Carolina 2 Robby Gardner eree CCR	9407							
	Client Sample ID:	MW	-AP-01			Р	roject:		SCEG01716c		
	Sample ID:	4893	39001			C	lient ID	:	GEEL003		
	Matrix:	GW									
	Collect Date:	27-A	UG-19 12:40								
	Receive Date:	07-S	EP-19								
	Collector:	Clie	nt								
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
	ow Proportional Co										
	28, Liquid "As Rec	-									
Radium-228	20, Elquid The Ree	U	ND	1.48	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
Rad Radiu	m-226										
Lucas Cell,	Ra226, liquid "As l	Receiv	ed"								
Radium-226			1.12	0.318	1.00	pCi/L			MXH8 09/19/19	0817 1914711	2
The follow	ving Analytical Metl		ere performed:								
Method		iption					Analys	t Co	mments		
1			846 9320 Modified								
2		03.1 Mo	aified		_	_		_			
	Fracer Recovery	Test			R	lesult	Nomin	al	~	Acceptable L	
Barium-133 T	racer (GFPC, F	a228, Liquid "As Received"						79.5	(15%-125%))
Notes:											
Column he	aders are defined as	follov	<u>vs:</u> Lo/LC: Critica								

DF: Dilution Factor Lc/LC: Critical Level DL: Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 23, 2019

	Company : Address :	GEL Engineering 2040 Savage Road							
	Contact: Project:	Charleston, South Carolina Mr. Robby Gardner Wateree CCR	29407						
	Client Sample ID:	MW-AP-11			P	roject:	SCEG01716c		
	Sample ID:	489339002			C	lient ID:	GEEL003		
	Matrix:	GW							
	Collect Date:	27-AUG-19 13:50							
	Receive Date:	07-SEP-19							
	Collector:	Client							
	Quali ow Proportional Co 28, Liquid "As Rece	unting	DL	RL	Units	PF DF	F Analyst Date	Time Batch	Method
Radium-228	20, Liquid As Reco	U ND	1.40	3.00	pCi/L		LXB3 09/18/19	1003 1913994	1
Rad Radiur	m-226				r				
Lucas Cell,	Ra226, liquid "As I	Received"							
Radium-226	-	0.952	0.653	1.00	pCi/L		MXH8 09/19/19	0817 1914711	2
The follow	ving Analytical Meth	nods were performed:							
Method	Descri	1				Analyst Co	mments		
1		04.0/SW846 9320 Modified							
2		03.1 Modified		_					
	· · · ·	Test		R	esult	Nominal	Recovery%	Acceptable Li	
Barium-133 T	racer C	GFPC, Ra228, Liquid "As Received"					72.6	(15%-125%)	
Notes:									

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Certificate of Analysis

Report Date: September 23, 2019

	Company : Address :		. Engineering) Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina Robby Gardner eree CCR	29407							
	Client Sample ID: Sample ID: Matrix:		-AP-02 339003				roject: lient ID	:	SCEG01716c GEEL003		
	Collect Date: Receive Date: Collector:	27- <i>I</i>	AUG-19 13:54 EEP-19 nt								
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Rad Gas Fl	ow Proportional Co	unting									
	28, Liquid "As Reco	-									
Radium-228	· •	U	ND	2.15	3.00	pCi/L			LXB3 09/16/19	1447 1913994	1
Rad Radiur											
	Ra226, liquid "As I	Receiv				~ ~ ~					
Radium-226		_	2.15	0.396	1.00	pCi/L			MXH8 09/19/19	0817 1914711	2
	ing Analytical Meth		vere performed:								
Method	Descr		1046 0220 M 115 1				Analys	t Coi	nments		
1 2	EPA 90 EPA 90		7846 9320 Modified								
-		Test			R	esult	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T			Ra228, Liquid "As Received"		N	csuit	Nomini	a1	67.9	(15%-125%)	
Notes:		, -								(
Column he	aders are defined as	follov	ws:								

DF: Dilution Factor Lc/LC: Critical Level DL: Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :	GEL Engineering 2040 Savage Road								
	Contact: Project:	Charleston, South Caro Mr. Robby Gardner Wateree CCR	olina 29407							
	Client Sample ID: Sample ID: Matrix: Collect Date: Receive Date: Collector:	: MW-AP-11D 489339004 GW 27-AUG-19 14:35 07-SEP-19 Client				roject: lient ID	:	SCEG01716c GEEL003		
Parameter	Qual	lifier Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
	ow Proportional Co	e								
Radium-228	228, Liquid "As Rec	2.96	1.52	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
Rad Radiur	m-226									
	Ra226, liquid "As									
Radium-226		2.59	0.693	1.00	pCi/L			MXH8 09/19/19	0817 1914711	2
	• •	thods were performed:								
Method 1 2	EPA 9	ription 004.0/SW846 9320 Modified 003.1 Modified				Analys	t Co	mments		
Surrogate/7	Fracer Recovery	Test		R	esult	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC, Ra228, Liquid "As Rece	eived"					78.4	(15%-125%))
Notes:										
Column he	aders are defined a		Critical Laval							

DF: Dilution Factor Lc/LC: Critical Level DL: Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :		L Engineering 0 Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina 2 Robby Gardner eree CCR	29407							
	Client Sample ID:	MW	V-AP-03			Р	roject:		SCEG01716c		
	Sample ID:	489	339005			C	lient ID	:	GEEL003		
	Matrix:	GW									
	Collect Date:	27-4	AUG-19 15:00								
	Receive Date:	07-5	SEP-19								
	Collector:	Clie	nt								
Parameter	Qual	ifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Rad Gas Fl	ow Proportional Co	unting									
GFPC, Ra2	28, Liquid "As Rec	eived'	,								
Radium-228		U	ND	2.12	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
Rad Radiu											
	Ra226, liquid "As	Receiv									
Radium-226			1.64	0.349	1.00	pCi/L			MXH8 09/19/19	0817 1914711	2
The follow	ving Analytical Met	hods v	vere performed:								
Method	Desci						Analys	t Co	mments		
1			V846 9320 Modified								
2		03.1 Mo	odified								
Surrogate/7	Fracer Recovery	Test			R	esult	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC, I	Ra228, Liquid "As Received"						74.4	(15%-125%))
Notes:											
Column he	aders are defined as	s follo	ws:	17 1							

DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :	GEL Engineering 2040 Savage Road							
	Contact: Project:	Charleston, South Carolina 2 Mr. Robby Gardner Wateree CCR	9407						
	Client Sample ID:	MW-AP-11D2			F	Project:	SCEG01716c		
	Sample ID:	489339006			C	Client ID:	GEEL003		
	Matrix:	GW							
	Collect Date:	27-AUG-19 15:30							
	Receive Date:	07-SEP-19							
	Collector:	Client							
	Quali ow Proportional Cor 28, Liquid "As Rece	unting	DL	RL	Units	PF DF	7 Analyst Date	Time Batch	Method
Radium-228	20, Elquid The Reed	3.13	1.69	3.00	pCi/L		LXB3 09/16/19	1312 1913994	1
Rad Radiur	m-226				-				
	Ra226, liquid "As H	Received"							
Radium-226		1.99	0.572	1.00	pCi/L	_	MXH8 09/19/19	0817 1914711	2
The follow	ving Analytical Meth	nods were performed:							
Method	Descri	•				Analyst Co	mments		
1 2		04.0/SW846 9320 Modified 03.1 Modified							
-		Test		R	esult	Nominal	Recovery%	Acceptable L	imits
Barium-133 T	racer C	GFPC, Ra228, Liquid "As Received"					86.2	(15%-125%))
Notes:	aders are defined as	6 H							

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :		L Engineering 0 Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina Robby Gardner teree CCR	29407							
	Client Sample ID:	MW	/-AP-03D			Р	roject:		SCEG01716c		
	Sample ID:	489	339007			C	lient ID	:	GEEL003		
	Matrix:	GW	τ								
	Collect Date:	27-	AUG-19 16:05								
	Receive Date:	07-3	SEP-19								
	Collector:	Clie	ent								
Parameter	Qual	ifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
	ow Proportional Co										
	28, Liquid "As Rec										
Radium-228	20, Elquid As Ree	civeu	4.61	1.54	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
Rad Radiur	m-226					I - ·					
Lucas Cell,	Ra226, liquid "As	Recei	ved"								
Radium-226			0.980	0.548	1.00	pCi/L			MXH8 09/19/19	0817 1914711	2
The follow	ving Analytical Met	hods v	vere performed:								
Method	Descr	iption					Analys	t Co	mments		
1			W846 9320 Modified								
2	EPA 9	03.1 M	odified								
Surrogate/7	Fracer Recovery	Test			R	esult	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC,	Ra228, Liquid "As Received"						74.4	(15%-125%)	
Notes:											
Column he	aders are defined as	follo	ws:	1 7 1							

DF: Dilution Factor Lc/LC: Critical Level DL: Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :		L Engineering 0 Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina Robby Gardner eree CCR	29407							
	Client Sample ID:	MW	Y-AP-10			Р	roject:		SCEG01716c		
	Sample ID:	4893	339008			C	lient ID	:	GEEL003		
	Matrix:	GW									
	Collect Date:	27-4	AUG-19 17:20								
	Receive Date:	07-5	SEP-19								
	Collector:	Clie	nt								
Deremeter	Qual	fing	Desult		DI	Unita	DE		Analyst Data	Time Datab	Mathad
Parameter	Qual		Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
	ow Proportional Co	-									
	28, Liquid "As Rec			1.00	2.00	0.4			1 202 00/16/10	1212 1012004	1
Radium-228 Rad Radium	m 226	U	ND	1.88	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
	Ra226, liquid "As	Docoir	vod"								
Radium-226	, Kazzo, liquid As	Keter	1.39	0.714	1.00	pCi/L			MXH8 09/19/19	0817 1914711	2
	ving Analytical Met	hods v		0.71		P					
Method	0	iption	fore performed.				Analys	t Co	mments		
1			/846 9320 Modified				7 mary 5				
2	EPA 9	03.1 Mo	odified								
Surrogate/7	Fracer Recovery	Test			R	lesult	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC, I	Ra228, Liquid "As Received"						84.5	(15%-125%))
Notes:											
Column he	aders are defined as	s follo	ws:								

DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :	GEL Engineeri 2040 Savage R										
	Contact: Project:	Charleston, Sou Mr. Robby Gar Wateree CCR	nth Carolina 2940' dner	7								
	Client Sample ID: Sample ID: Matrix: Collect Date: Receive Date: Collector:	MW-AP-05 489339009 GW 28-AUG-19 13 07-SEP-19 Client	35				roject: lient ID		SCEG01716c GEEL003			
Parameter	Quali	fier Result		DL	RL	Units	PF	DF	Analyst Date	Time	Batch	Method
Rad Gas Fl	ow Proportional Co	unting										
	28, Liquid "As Rece											
Radium-228 Rad Radiur	n 776	U ND		2.14	3.00	pCi/L			LXB3 09/16/19	1447	1913994	1
	Ra226, liquid "As I	Received"										
Radium-226	Razzo, ilquid As i	0.919	0.	827	1.00	pCi/L			MXH8 09/19/19	0851	1914711	2
The follow	ing Analytical Meth	ods were perform	ned:			-						
Method	Descri	-					Analys	t Cor	nments			
1		04.0/SW846 9320 Mo	dified									
2		3.1 Modified										
	5	Test			Re	sult	Nomin	al	~	Accept		
Barium-133 T	racer C	GFPC, Ra228, Liquid	"As Received"						74.6	(15%	6-125%)	
Notes:												
~												

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :		L Engineering 0 Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina 2 Robby Gardner teree CCR	29407							
	Client Sample ID:	MW	/-AP-09			Р	roject:		SCEG01716c		
	Sample ID:	489	339010			C	lient ID	:	GEEL003		
	Matrix:	GW	r								
	Collect Date:	28-2	AUG-19 13:58								
	Receive Date:	07-5	SEP-19								
	Collector:	Clie	ent								
Parameter	Qual	fier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
	ow Proportional Co								j ~		
	28, Liquid "As Rec		•								
Radium-228	20, Liquid As Rec	civeu	1.58	1.23	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
Rad Radiur	m-226					P					
Lucas Cell,	Ra226, liquid "As	Receiv	ved"								
Radium-226	/ 1		1.44	0.522	1.00	pCi/L			MXH8 09/19/19	0851 1914711	2
The follow	ving Analytical Met	nods v	vere performed:								
Method	Descr	iption					Analys	t Co	mments		
1			V846 9320 Modified				-				
2	EPA 9	03.1 M	odified								
Surrogate/7	Fracer Recovery	Test			R	esult	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC, I	Ra228, Liquid "As Received"						85.1	(15%-125%))
Notes:											
Column he	aders are defined as	follo	ws:	1 7 1							

DF: Dilution Factor Lc/LC: Critical Level DL: Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :		L Engineering 0 Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina Robby Gardner eree CCR	29407							
	Client Sample ID:	MW	/-AP-08			Р	roject:		SCEG01716c		
	Sample ID:	4893	339011			C	lient ID):	GEEL003		
	Matrix:	GW									
	Collect Date:	28-4	AUG-19 14:50								
	Receive Date:	07-5	SEP-19								
	Collector:	Clie	nt								
Parameter	Qual	ifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Rad Gas Fl	ow Proportional Co										
	28, Liquid "As Rec	-									
Radium-228	20, Elquia Tis Ree	U	ND	1.61	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
Rad Radiur	n-226					1					
Lucas Cell,	Ra226, liquid "As	Receiv	ved"								
Radium-226			1.70	0.614	1.00	pCi/L			MXH8 09/19/19	0851 1914711	2
The follow	ving Analytical Met	hods v	vere performed:								
Method	Desci	iption					Analys	t Co	mments		
1			/846 9320 Modified				_				
2	EPA 9	03.1 Mo	odified								
Surrogate/7	Fracer Recovery	Test			R	Result	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC, I	Ra228, Liquid "As Received"						93.8	(15%-125%))
Notes:											
Column he	aders are defined as	s follo	ws:								

DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :	GEL Engine 2040 Savage									
	Contact: Project:	Charleston, S Mr. Robby C Wateree CC		407							
	Client Sample ID	: MW-AP-09I)			P	roject:		SCEG01716c		
	Sample ID:	489339012				C	Client ID	:	GEEL003		
	Matrix:	GW									
	Collect Date:	28-AUG-19	14:54								
	Receive Date:	07-SEP-19									
	Collector:	Client									
Parameter	Qual	lifier Result		DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Rad Gas Fl	ow Proportional Co								j i i i i i i i i i i i i i i i i i i i		
	28, Liquid "As Red	-									
Radium-228	20, Elquid As Ko	1.57	7	1.29	3.00	pCi/L			LXB3 09/16/19	1312 1913994	. 1
Rad Radiur	m-226					1					
Lucas Cell,	Ra226, liquid "As	Received"									
Radium-226		2.53	3	0.793	1.00	pCi/L			MXH8 09/19/19	0851 1914711	2
The follow	ring Analytical Met	hods were perfe	ormed:								
Method	Desc	ription					Analys	t Co	mments		
1		004.0/SW846 9320	Modified				_				
2	EPA 9	003.1 Modified									
Surrogate/7	Tracer Recovery	Test			I	Result	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC, Ra228, Liq	uid "As Received"						80.2	(15%-125%))
Notes:											
Column he	aders are defined a	s follows:	Lo/LC: Critical								

DF: Dilution Factor Lc/LC: Critical Level DL: Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :		L Engineering 0 Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina Robby Gardner eree CCR	29407							
	Client Sample ID:	MW	V-AP-01A			Р	roject:		SCEG01716c		
	Sample ID:		339013				lient ID	:	GEEL003		
	Matrix:	GW									
	Collect Date:	28-4	AUG-19 10:37								
	Receive Date:	07-5	SEP-19								
	Collector:	Clie	nt								
Parameter	Qual	ifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
	ow Proportional Co					Cints			That you Dute	Time Daten	method
	28, Liquid "As Rec	-									
Radium-228	20, Liquid As Rec	U	ND	1.34	3.00	pCi/L			LXB3 09/16/19	1312 1913994	1
Rad Radiur	m-226	U	112	110 1	0.000	perz			21120 03710,13	1012 171077	
	Ra226, liquid "As	Receiv	ved"								
Radium-226	1		0.883	0.465	1.00	pCi/L			MXH8 09/19/19	0851 1914711	2
The follow	ving Analytical Met	hods v	vere performed:								
Method	Descr	iption					Analys	t Co	mments		
1			/846 9320 Modified				-				
2	EPA 9	03.1 Mo	odified								
Surrogate/7	Fracer Recovery	Test			R	esult	Nomin	al	Recovery%	Acceptable L	imits
Barium-133 T	racer	GFPC, I	Ra228, Liquid "As Received"						82.5	(15%-125%))
Notes:											
Column he	eaders are defined as	s follo	ws:	17 1							

DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :	GEL Engineering 2040 Savage Road							
	Contact: Project:	Charleston, South Carolina Mr. Robby Gardner Wateree CCR	a 29407						
	Client Sample ID: Sample ID: Matrix: Collect Date: Receive Date: Collector:	MW-AP-03D2 489339014 GW 28-AUG-19 10:45 07-SEP-19 Client				Project: Client ID:	SCEG01716c GEEL003		
Parameter	Quali		DL	RL	Units	PF DF	Analyst Date	Time Batch	Method
	ow Proportional Con 28, Liquid "As Reco n-226	•	1.33	3.00	pCi/L		LXB3 09/16/19	1312 1913994	1
Lucas Cell, Radium-226	Ra226, liquid "As I	Received" 0.335 nods were performed:	0.321	1.00	pCi/L		MXH8 09/19/19	0851 1914711	2
Method 1 2	Descri EPA 90	*				Analyst Co	mments		
Barium-133 T	Fracer Recovery	Test GFPC, Ra228, Liquid "As Received	n	R	esult	Nominal	Recovery% 81.8	Acceptable Li (15%-125%)	
Notes:		6 H							

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :	GEL Engineering 2040 Savage Road							
	Contact: Project:	Charleston, South Carolina Mr. Robby Gardner Wateree CCR	29407						
	Client Sample ID: Sample ID:	MW-AP-12 489339015				roject: Client ID:	SCEG01716c GEEL003		
	Matrix:	GW				ment ID.	GLEL005		
	Collect Date:	28-AUG-19 11:38							
	Receive Date:	07-SEP-19							
	Collector:	Client							
Parameter	Quali	fier Result	DL	RL	Units	PF DF	F Analyst Date	Time Batch	Method
Rad Gas Fl	ow Proportional Cou	unting							
	28, Liquid "As Rece								
Radium-228 Rad Radiur	n 226	U ND	2.06	3.00	pCi/L		LXB3 09/16/19	1312 1913994	1
	Ra226, liquid "As I	Received"							
Radium-226	Ruzzo, ilquid 7131	0.726	0.409	1.00	pCi/L	,	MXH8 09/19/19	0851 1914711	2
The follow	ing Analytical Meth	ods were performed:							
Method	Descri					Analyst Co	mments		
1		04.0/SW846 9320 Modified							
2		3.1 Modified		_					
	2	Test		Re	esult	Nominal	~	Acceptable Li	
Barium-133 T	racer C	3FPC, Ra228, Liquid "As Received"					77.7	(15%-125%)	
Notes:									
<u> </u>	adara ara dafinad aa	6.11							

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Report Date: September 23, 2019

	Company : Address :		L Engineering 0 Savage Road								
	Contact: Project:	Mr.	rleston, South Carolina Robby Gardner eree CCR	29407							
	Client Sample ID:	MW	V-AP-04			Р	roject:		SCEG01716c		
	Sample ID:		339016				lient ID	:	GEEL003		
	Matrix:	GW									
	Collect Date:	28-4	AUG-19 12:00								
	Receive Date:	07-5	SEP-19								
	Collector:	Clie	nt								
Parameter	Qual	ifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Rad Gas Fl	ow Proportional Co	unting	, ,								
	28, Liquid "As Rec	eived'									
Radium-228		U	ND	1.96	3.00	pCi/L			LXB3 09/16/19	1314 1913994	1
Rad Radiur											
	Ra226, liquid "As	Receiv		0.500	1.00	C : T				0051 1014511	2
Radium-226		_	0.971	0.583	1.00	pCi/L			MXH8 09/19/19	0851 1914711	2
	ing Analytical Met		vere performed:								
Method		iption	10460000 L 101 1				Analys	t Co	mments		
1 2		04.0/SV 03.1 Me	V846 9320 Modified								
			amea		-				_		
	Tracer Recovery	Test			R	esult	Nomin	al	•	Acceptable L	
Barium-133 T	racer	GFPC, I	Ra228, Liquid "As Received"						90.3	(15%-125%)	1
Notes:											
Column he	aders are defined as	s follo	ws:	1 7 1							

DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 23, 2019

	Company : Address :	GEL Engineering 2040 Savage Road							
	Contact: Project:	Charleston, South Carolina Mr. Robby Gardner Wateree CCR	29407						
	Client Sample ID:	MW-AP-13			F	Project:	SCEG01716c		
	Sample ID:	489339017				Client ID:	GEEL003		
	Matrix:	GW							
	Collect Date:	28-AUG-19 12:34							
	Receive Date:	07-SEP-19							
	Collector:	Client							
	Quali ow Proportional Cou	unting	DL	RL	Units	PF DF	F Analyst Date	Time Batch	Method
	28, Liquid "As Rece								
Radium-228 Rad Radiur	m 226	U ND	2.51	3.00	pCi/L		LXB3 09/16/19	1314 1913994	1
Lucas Cell, Radium-226	Ra226, liquid "As I	Received" 0.979 nods were performed:	0.300	1.00	pCi/L		MXH8 09/19/19	0922 1914711	2
Method	Descri	1				Analyst Co	mments		
1		4.0/SW846 9320 Modified				<u> </u>			
2	EPA 90	3.1 Modified							
Surrogate/7	Tracer Recovery	Test		R	esult	Nominal	Recovery%	Acceptable Li	mits
Barium-133 T	'racer C	GFPC, Ra228, Liquid "As Received"					76.5	(15%-125%)	
Notes:	adars are defined as	6 H							

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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	GEL Engineering 2040 Savage Road		<u>C</u>	<u>)C Sı</u>	ummar	<u>'Y</u>		Report D:	ate: September 23, 201	19 Page 1 of 2
Contact:	Charleston, South Car Mr. Robby Gardner	olina								
Workorder:	489339									
Parmname		NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
Rad Gas Flow Batch	1913994									
	34 489339008 DUP	U	1.05	U	-0.33	pCi/L	N/A		N/A LXB3	09/16/19 13:14
QC120437423 Radium-228	35 LCS	61.7			57.6	pCi/L		93.4	(75%-125%)	09/16/19 13:14
QC120437423 Radium-228	33 MB			U	-0.356	pCi/L				09/16/19 13:14
Rad Ra-226 Batch	1914711									
QC120437609 Radium-226	94 489339013 DUP		0.883		1.30	pCi/L	38		(0% - 100%) MXH8	09/19/19 09:22
QC120437609 Radium-226	96 LCS	27.1			23.5	pCi/L		86.9	(75%-125%)	09/19/19 09:22
QC120437609 Radium-226	93 MB			U	0.201	pCi/L				09/19/19 09:22
QC120437609 Radium-226	95 489339013 MS	27.1	0.883		24.7	pCi/L		87.9	(75%-125%)	09/19/19 09:22

Notes:

The Qualifiers in this report are defined as follows:

- ** Analyte is a Tracer compound
- < Result is less than value reported

> Result is greater than value reported

BD Results are either below the MDC or tracer recovery is low

FA Failed analysis.

H Analytical holding time was exceeded

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QC Summary

Workor	der: 489339 Page 2 of 2					
Parmnai	ne NOM Sample Qual QC Units RPD% REC% Range Anlst Date Time					
J	See case narrative for an explanation					
J	Value is estimated					
К	Analyte present. Reported value may be biased high. Actual value is expected to be lower.					
L	Analyte present. Reported value may be biased low. Actual value is expected to be higher. M if above MDC and less than LLD REMP Result > MDC/CL and < RDL RPD or %Recovery limits do not apply.					
М	M if above MDC and less than LLD					
М	REMP Result > MDC/CL and < RDL					
N/A	RPD or %Recovery limits do not apply.					
N1	See case narrative					
ND	Analyte concentration is not detected above the detection limit					
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier					
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.					
R	Sample results are rejected					
U	Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.					
UI	Gamma SpectroscopyUncertain identification					
UJ	Gamma SpectroscopyUncertain identification					
UL	Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.					
Х	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier					
Y	Other specific qualifiers were required to properly define the results. Consult case narrative.					
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.					
h	Preparation or preservation holding time was exceeded					
	icates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or % RPD not applicable. elative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than					

[^] The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Project # GEL Quote #: COC Number ⁽¹⁾ .	GEL Work Order Number:	Chain of	LLC V 69 339 bioassay I Specialty Analytics al Request
Gient Name: Downlyne.		hone #	Samet: A
NOM T	2 - 15 B		Sample Analysis Requested [[Fill in the number of containers for each test]
Hoject/Site Name: Waller CCR	AshPoud	Fax #	Should this a MI
酸ollected By: ビドン	Send Results To: CCR	R Gray / Robay gardin	a, of ce r v
Sample ID	*Date Collected	Field	
* For composites - indicate start and stop date time $M_1 M - \Delta P - M_1$	date/time (mm-dd-yy)	Code (3) Filtered (3)	soq (1) sod (1) (1) (1) (1) (1) (1) (1) (1)
M.W-AP- 11	11-17-00	1250 N N GW	
MW-A-02		1354	
MIN-AP-11D		1435	
MW- AP- 03		(500	
2011-9A-WM		1530	
MW-A-030		1605	
MW-AP-10	N	V V V OZLI	
	in of Custod		TAT Requested: Normal: Rush: X Specify: 1 100 (Subject to Surcharge)
By (Signed) Date	~	Date	Fax Results: [] Yes [] No
	1800 1 Jock 1		Select Deliverable: [] C of A [] QC Summary [] level 1 [] Level 2 [] Level 3 [] Level 4
10	ଔ		
For sample shipping and delivery details, see Sample Receipt & Revery form (SRR)	e Sample Receint & Review form ()	UM 8/38/19	Samile Collection Time Zone (Measured of Devices (1) Custody Seal Intact? [] Yes [] No Cooler Temp: 2 [°C
1.) Chain of Custody Number = Client Determined $\mathcal{M}_{\mathcal{M}} \mathcal{M}_{\mathcal{M}} \mathcal{M} \mathcal{M}_{\mathcal{M}} \mathcal{M} \mathcal{M} \mathcal{M} \mathcal{M} \mathcal{M} \mathcal{M} M$	Will/N Gry 9/5/19 @ 132 = Field Dublicate, EB = Equipment Blank, N	16 KOY OL 9 18 = Matrix Snike Samula MSD = MariesSeries	-5-19 CA322
 Field Filtered: For liquid matrices, indicate with a - Y - fi Matrix Codes: DW=Drinking Wave CW=Geomedwave 	for yes the sample was field filtered or - N - c SW=Surface Ways Ways Ways Ways Westington Ways with	for sample was not field filtered.	3.) Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. M. 9-6-19 20 24 7 4.) Matrix Codes DW=Drinktion Water CW=Gronndwater SW=Surface Western Avera Western Avera Western Code Spectra Spec
 The state of the s	a, 5W-5uttace water, W W W Water, 1 ed (i.e. 82608, 6010 B/7470A) and number o 2 Acid. SH = Sodium Hydroxide: SA = Sulfa	W=Water 0.11.=Miles Liquid, 30=Soli, 3D=Soli of containers p. wig/rd for each (i.e. 8260B - 3, 6 rie Avid AA = Accordia Avid HV = 11	0,
 Are there any known or possible hazards associated with these samples? 	Characteristic Hazards	Listed Waste [Waste]] [Waste]]	11.11
RCRA Metals	CO = Corrosive RE = Reactive	(F.K.P and U-listed wastes.) Waste code(s):	estos, beryllium, irritants, other)
	TSCA Regulated	N	Description:
Cd = Cadmium Ag= Silver Cr = Chromium MR= Miscellaneous	PCB = Polychlorinated hinhemote		
	erfuentio		

Page: C of L		. CEI I abrantania II C	
Boject #		Laboratories, LLC 2040 Savage Road	
	- 7	iaity Analytics	
	Chain	or custody and Analytical Kequest Phone: (843) 556-8171	
6	GEL Work Urder Number: GEL Project Manager:		
Joninion	Phone #	Sample Analysis Requested ⁽⁵⁾ (Fill in the number of containers for each test)	r each test)
GiectSite Name: Workere CCR Ash Pond	oud Fax #		< Preservative Tvpc (6)
Address:			
Gillected By: CFW Send Results To:	ults To: CCR Granp		Comments
Sample ID *Encomparties - indicate start and standard	*Date Collected Collected Collected (Military) QC Field Sample	ovitosoiba oliu oligou aseni oliase voimu isto voimu is	roue. exua sample is required for sample specific QC
MW-AP-OS	1335 N N	L	
MW- AP-09	1358 N N		
MW-AP-08			
MW-AP-090	V HISH N N GU		
	Chain of Custody Signatures	TAT Requested: Normal: Rush: Specify: (Su	(Subject to Surcharge)
y (Signed)	Received by (signed) Date Time	Fax Results: [] Yes [] No	,
12 /	1 Locked Truck 8/28/19 1800	Select Deliverable: [] C of A [] QC Summary [] level 1 [] Level 2 [] Level 3	Level 3 [] Level 4
Ked muck 8/28/19	2 all 8/28/19 0700	Additional Remarks:	1
3 Joe Hill 8/29/19 1440	3 Printh Car 8129/19 1445	For Lab Receiving Use Only: Custody Seal Intact? [] Yes [] No Cooler Temp:	emp: °C
		[] Other:	
1) Chain of Custody Number = Client Determined $\mathcal{M}_{M}\mathcal{M}$ \mathcal{M}_{S}/ q 132.8 $\mathcal{M}_{M}\mathcal{M}$ \mathcal{N}_{C} γ - ζ - β 132.8 (2.2) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sumple, G = Grah, C = Composite	$\frac{q_{15}}{16}$, $\frac{q_{12}}{12}$, $q_$	5 - 19 $1328we Duplicipe Sample, G = Grab, C = Composite$	
 Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample v Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Wate 	was field filtered or - N - for sumple was not field filtered.	 Field Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for sample was not field filtered. Matrix Codes: DW=Dinking Water, GW=Groundwater, SW=Surface Water, WW=Water, ML=Mise Liquid, SO=Soli, SD=Sodiment, SL=Sludge, SS=Solid Water, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal 	
 Sample Analysis Requested: Analytical method requested (i.e. 82608, 60108/7470A) and number of containers provided for each (i.e. 8260B - 3, 60108/7470A - 1). Preservative Type: Ha = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Suffuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosolfic Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosolfic Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosolfic Acid, AA = Ascorbic Acid, AK = Hexane, ST = Sodium Thiosolfic Acid, AA = Ascorbic Acid, AA = Ascorbic Acid, AA = Ascorbic Acid, AA = Sodium Thiosolfic Acid, SH = Sodium Hydroxide, SA = Sodium Hydro	B/7470A) and number of containers provided for each (i.e. $8260B - 3$, f n Hydroxide, $SA = Suffuric Acid, AA = Ascorbic Acid, HX = Hexane. S$	6010B74704 - 1). Stre Pue Pue 9-7 - 19 994	alala au
T.) Are there any known or possible hazards Characteriance $associated$ with these sumbles? E1 = Flower	Characteristic Hazards Listed Waste) c W	Please provide any additional details
	(F,K,P and U	os. beryllium, irritants, other	below regarding hundling and/or disposal concerns. (i.e Origin of sample(s), inpe
Hg= Mercury So- Solamina	uvo Maste codels):	misc. health hazards, etc.) Of site collected fro	of site collected from, odd matrices, etc.)
Ag= Silver	1 DCA Regulated PCB = Polychlorinated		
CT = Curomum MK= Miscellaneous bipl Pb = Lead RCRA metals	biphenyls		

GEL Laboratories, LLC 2040 Savage Road	Charleston, SC 29407	Phone: (843) 556-8171 Ear. (843) 744-1170	(Fill in the number of containers for each test)	< Preservative Type (6)		Comments Note: extra samule is	required for sample specific OC								Specify: 1 W. & Subject to Surcharge)		[] level 1 [] Level 2 [] Level 3 [] Level 4] Yes [] No Cooler Temp:OC	intain [] Other:	240	cal, N=Nasal			Please provide any additional details below recording handling and by discovery		of site collected from, odd matrices. etc.)			
Laboratories LLC	iaity Analytics		Sample Analysis Requested ⁽⁵⁾		sample be considered:	span	tan number solor into. (a) number solor into. (a) number solor into (b) number solor int	91							TAT Requested: Normal: Rush: X	Fax Results: [] Yes [] No	Select Deliverable: [] C of A [] QC Summary	Additional Remarks:	Lab Receiving	me Zone: [] Eastern [] Pacific [] Central [] Mountain	M, MMM , $ONDN$ C , uplicate Sample, $G = Grabit C = Composite$	nt, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fec	0B/7470A - 1).	Sodium Thiosulfate, If no preservative is added = leave field blank	Officer / Unknown	(i.e.: Highlow pH, asbestos, beryllium, irritants, other mice, horthh harrowle, ore)	Description:			
GEL Laborator	geroan ' Grennsuy Frauconemistry Frauconoassay Espec Chain of Cristodiv and Analutical Dominat	GEL Work Order Number: GEL Project Manager:	Phone #	Pand Fax#		Send Results To. DEC Come Construction I Reproved the	*Time cted Collected (Military) OC		N N Shoi (2	1200 N N SW	V 1234 N N GW			Chain of Custody Signatures	Received by (signed) Date Time	312810	MI NUL	N.		1.) Chant of Cassoop Number = Chen Determined シーチャート サーチ・サート のちり のちり パーパー 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, 3.) Field Filtered: For liquid matrices, indicate with a - Y - for ves the sample was field filtered or - N - for sample was not field Filtered.	4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Water, ML=Mise Liquid, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecal, N=Nasal	010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).	w. risservative 1 ype: HA = Hydrocanore Acid, M = Nutre Acid, SH = Sodium Hydroxide, SA = Suffuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank (1) Are there any known or possible hazards [Characterictic Hazards] [1, see AW, etc.]	_]_0	Orrosive (F,K,P and U-listed wastes.) cactive Wuste code(s):	•	TSCA Regulated PCB = Polychlorinated	biphenyls	•
Page:	KOC Number ⁽¹⁾ .		Gent Name: Dowiniew Env SEG	Bject/Site Name: Wollivee CCR ASh	Seducess:	llected By: EFM	Sample ID	MW - MP - OIA	A-	MW-AP-12	MW-AP-OY	MW-AP-13					61/22/3	ଞ	3 MXM WW. 9/6/13 1200	2 For sample supping and defivery details, see Sample Receipt & Review form (SRR).	 Craut of Castory Number = Chem Determined Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSI QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSI Pield Filtered: For liquid matrices, indicate with a - Y - for yes the sample was field filtered or - N - for second was not field Filtered. 	 Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface ¹ 	 Sample Analysis Requested: Analytical method requested (i.e. 82608, 60108/7470A) and number of containers provided 	(b) FISSEVALIVE 1996: HA = Hydrochloric Acid, NI = Nitric Acid, SH = So (1) Are there any known or possible hazards		CO = Corrosive RCRA Metals RE = Reactive	Hg= Mercury	Se= Selenum Ag= Silver	num MR= Miscellaneous	RCRA metals

CEEC Laboratories

Client: SCEC			1	SAMPLE RECEIPT & REVIEW FORM
<u>orea</u>	<i>·</i> · ·		1	AR/COC/Work Order: 489339
Received By: STACY BOON	E		Date	Received: T-SEPT-19
Carrier and Tracking Number		a		Circle Applicable: FedEx Express FedEx Ground UPS Field Services Courier Other
Suspected Hazard Information	Yes	No	•U'Ne	et Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
			Hazaro	d Class Shipped:
A)Shipped as a DOT Hazardous? B) Did the client designate the samples are to be				2910, Is the Radioactive Shipment Survey Compliant? Yes No
C) Did the RSO classify the samples as	-	Ē	Maxin	num Net Counts Observed (Observed Counts And Party 10
radioactive?				ACCAS, KAUT KAUZ KAUJ
D) Did the client designate samples are hazardous?		É	1	notation or hazard labels on containers equal client designation.
E) Did the RSO identify possible hazards?		Ľ	PCB's	Flammable Foreign Soil RCRA Asbestos Beryllium Other:
Sample Receipt Criteria	Yes	YZ N	ź	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	-			ince Applicable: Seals broken Damaged container Leaking container Other (describe)
Chain of custody documents included with slipment?	/			incle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within $(0 \le 6 \text{ deg. C})$?*		-	*a	reservation Method: Wet Ice Ice Packs Dry ice None. Other: all temperatures are recorded in Celsius TEMP: 21 c
4 Daily check performed and passed on IR temperature gun?	1		1 SC	condary Temperature Device Serial # (If Applicable):
5 Sample containers intact and scaled?	~		Cir	rele Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?		V 27.5	1	mple ID's and Containers Atlected: Preservation added. Lot#:
7 Do any samples require Volatile Analysis?				Yes, are Encores or Soil Kits present for solids? Yes No NA (If yes, take to VOA Freezer) o liquid VOA vials contain acid preservation? Yes No NA (If unknown, select No) e liquid VOA vials free of hendspace? Yes No NA mple ID's and containers affected:
8 Samples received within holding time?				's and tests affected:
9 Sample ID's on COC match ID's on bottles?		いいた	ID'	's and containers affected:
10 Date & time on COC match date & time on bottles?	イ	-	Сіл	rcle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	1		Cin	cle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided?	イ			
13 COC form is properly signed in relinquished/received sections?			Cin	cle Applicable: Not relinquished Other (describe)
Comments (Use Continuation Form if needed):				
PM (or PMA) revie	sw: I	uitials _	10 Date 99 Page of

,

Page 25 of 27 SDG: 489339

Radiochemistry Technical Case Narrative GEL Engineering, LLC SDG #: 489339

Product: GFPC, Ra228, Liquid Analytical Method: EPA 904.0/SW846 9320 Modified Analytical Procedure: GL-RAD-A-009 REV# 17 Analytical Batch: 1913994

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	Client Sample Identification
489339001	MW-AP-01
489339002	MW-AP-11
489339003	MW-AP-02
489339004	MW-AP-11D
489339005	MW-AP-03
489339006	MW-AP-11D2
489339007	MW-AP-03D
489339008	MW-AP-10
489339009	MW-AP-05
489339010	MW-AP-09
489339011	MW-AP-08
489339012	MW-AP-09D
489339013	MW-AP-01A
489339014	MW-AP-03D2
489339015	MW-AP-12
489339016	MW-AP-04
489339017	MW-AP-13
1204374233	Method Blank (MB)
1204374234	489339008(MW-AP-10) Sample Duplicate (DUP)
1204374235	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Technical Information

Recounts

Samples 489339003 (MW-AP-02) and 489339009 (MW-AP-05) were recounted to verify sample results. Recounts are reported. Sample 489339002 (MW-AP-11) was re-eluted and recounted to verify sample result. The recount is reported.

Product: Lucas Cell, Ra226, liquid <u>Analytical Method:</u> EPA 903.1 Modified <u>Analytical Procedure:</u> GL-RAD-A-008 REV# 15 <u>Analytical Batch:</u> 1914711

The following samples were analyzed using the above methods and analytical procedure(s).

GEL Sample ID#	<u>Client Sample Identification</u>
489339001	MW-AP-01
489339002	MW-AP-11
489339003	MW-AP-02
489339004	MW-AP-11D
489339005	MW-AP-03
489339006	MW-AP-11D2
489339007	MW-AP-03D
489339008	MW-AP-10
489339009	MW-AP-05
489339010	MW-AP-09
489339011	MW-AP-08
489339012	MW-AP-09D
489339013	MW-AP-01A
489339014	MW-AP-03D2
489339015	MW-AP-12
489339016	MW-AP-04
489339017	MW-AP-13
1204376093	Method Blank (MB)
1204376094	489339013(MW-AP-01A) Sample Duplicate (DUP)
1204376095	489339013(MW-AP-01A) Matrix Spike (MS)
1204376096	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

There are no exceptions, anomalies or deviations from the specified methods. All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.



Fax: (803) 217-9911

REPORT TO: Rashida Marlowe Rocky Archer	Sample Water Date & ⁻ Date & ⁻	Time Sampl	7 142 P 1-05 (NP ed: Augus tted: Augus	t 28, 2019 t 29, 2019	W of Law Stratt Party shares at The set Very	13:35 14:40 e: W	AAP105T	DS
AP1-05 CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)		ecoro Com	File:	1908290 Analysis Time	07
Chlorides by IC EPA 300.0	19.4	0.50	0.038	mg/L	9	2/19	05:55	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	9	2/19	05:55	BB
pH by SM4500HB(2011) Holding Time of 15 minute	6.20 s has been exceede	ed.		S.U.	9	4/19	15:56	PRC
Sulfates by IC EPA 300.0	23.4	0.50	0.063	mg/L	9	2/19	05:55	BB
Total Alkalinity by SM2320B	154	0.50	0.50	mg/L	9	4/19	12:56	PRC
Total Dissolved Solid-SM2540C	225	2.0	2.0	mg/L	9	4/19	12:02	PRC

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: Phillip Capeta



Tel: (803)217-9384 Fax: (803) 217-9911

REPORT TO: Rashida Marlowe Rocky Archer	Sam Wate Date Date	tember 06, 2 ple ID: BA0 e ree Well A & Time Sampl & Time Submi cted by: A.HIL	3:58 4:40 e: WAAP109	гDS			
AP1-09 CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection	Unite	Com	File: 1908290 leted Analysis ate & Time	1 1
Chlorides by IC EPA 300.0	42.0	1,00	0.076	mg/L	9/	2/19 05:55	BB
Fluoride by IC EPA 300.0	0.48	0.20	0.016	mg/L	9/	2/19 05:55	BB
oH by SM4500HB(2011) Holding Time of 15 minutes h	6.29 as been excee	ded.		S.U.	9/	4/19 15:56	PRC
Sulfates by IC EPA 300.0	152	1.00	0.126	mg/L	9/	2/19 05:55	BB
Fotal Alkalinity by SM2320B	125	0,50	0.50	mg/L	9/	4/19 12:56	PRC
otal Dissolved Solid-SM2540C	403	2.0	2.0	mg/L	9/	4/19 12:02	PRC

If there are any questions concerning this sample, please contact the lab at (803) 217-9384,

Approved By: Phillips Copres



Fax: (803) 217-9911

Septen	nber 06, 20	19		And the second second			and Section of
Watere Date & T Date & T	, 14 14	:40	AP108T	DS			
• 	Reporting	Detection					1 1
			Units				Chemist
20.3	0.50	0.038	mg/L	9/2	/19 0	5:55	BB
D.61	0.10	0.008	mg/L	9/2	/19 0	5:55	BB
5.13 en exceeded	d.		S.U.	9/4	/19 1	5:56	PRC
36.4	0.50	0.063	mg/L	9/2	/19 0	5:55	BB
172	0.50	0.50	mg/L	9/4	/19 1	2:56	PRC
292	2.0	2.0	mg/L	9/4	/19 1	2:02	PRC
	Sample Watere Date & 7 Date & 7 Date & 7 Collecter 20.3 0.61 5.13 en exceeder 36.4	Sample ID: BA07' Wateree Well AF Date & Time Sample Date & Time Submitt Collected by: A.HILL Result Reporting Limit(PQL) 20.3 0.50 0.61 0.10 5.13 en exceeded. 36.4 0.50 172 0.50	Date & Time Sampled:August Date & Time Submitted:Date & Time Submitted:August Collected by:ResultReporting Limit(PQL)Detection Limit(MDL)20.30.500.0380.610.100.0083.13 en exceeded.0.500.0631720.500.50	Sample ID: BA07144Wateree Well AP1-08 (NPDES/CCFDate & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocationLogin ReLogin ReResultReporting Limit(PQL)Detection Limit(MDL)Units20.30.500.038mg/L0.610.100.008mg/L36.40.500.063mg/L1720.500.50mg/L	Sample ID: BA07144 Wateree Well AP1-08 (NPDES/CCR) Date & Time Sampled: August 28, 2019 Date & Time Submitted: August 29, 2019 Collected by: A.HILL Location Code Login Record I Result Reporting Detection Limit(MDL) Units Comparison 20.3 0.50 0.038 mg/L 9/2 0.61 0.10 0.008 mg/L 9/2 3.13 S.U. 9/4 an exceeded. 0.50 0.063 mg/L 9/2 36.4 0.50 0.063 mg/L 9/2 172 0.50 0.50 mg/L 9/4	Sample ID: BA07144 Wateree Well AP1-08 (NPDES/CCR) Date & Time Sampled: August 28, 2019 Date & Time Submitted: August 29, 2019 Collected by: A.HILL Login Record Result Reporting Date & Detection Limit(PQL) Limit(MDL) 0.61 0.10 0.61 0.10 0.61 0.50 0.61 0.50 0.61 0.50 0.61 0.50 0.61 0.50 0.61 0.50 0.61 0.50 0.50 0.063 menexceeded. 36.4 0.50 0.50 0.50 172 0.50	Sample ID: BA07144 Wateree Well AP1-08 (NPDES/CCR) Date & Time Sampled: August 28, 2019 14:50 Date & Time Submitted: August 29, 2019 14:40 Collected by: A.HILL Location Code: WAAP108TI Login Record File: 19082900 Result Reporting Detection Limit(PQL) Limit(MDL) Units Completed Analysis Date & Time 0.50 0.038 mg/L 9/2/19 05:55 0.61 0.10 0.008 mg/L 9/2/19 05:55 0.61 0.10 0.008 mg/L 9/2/19 05:55 3.13 S.U. 9/4/19 15:56 en exceeded. 36.4 0.50 0.063 mg/L 9/2/19 05:55 172 0.50 0.50 mg/L 9/4/19 12:56

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: ______ Caper



Tel: (803)217-9384 Fax: (803) 217-9911

	Septe	mber 06, 2	019				
REPORT TO: Rashida Marlowe Rocky Archer	Water Date & Date &	e ID: BA07 ee Well A Time Sample Time Submit ed by: A.HILI	14	:54 :40 : WAAP1091	DTDS		
AP1-09D				Login F	Record F	-ile: 1908290	007
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units		eted Analysi te & Time	s Chemist
Chlorides by IC EPA 300.0	18.6	1.00	0.076	mg/L	9/2	/19 05:55	BB
Fluoride by IC EPA 300.0	Less than PQL	0.20	0.016	mg/L	9/2	/19 05:55	BB
pH by SM4500HB(2011) Holding Time of 15 minute	5.71 s has been exceede	ed.		S.U.	9/4	/19 15:56	PRC
Sulfates by IC EPA 300.0	114	1.00	0.126	mg/L	9/2	/19 05:55	BB
Total Alkalinity by SM2320B	31.9	0.50	0.50	mg/L	9/4,	/19 12:56	PRC
Total Dissolved Solid-SM2540C	230	2.0	.2.0	mg/L	9/4/	19 12:02	PRC

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If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: -Phillip Capelu



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Sample ID: BA07054

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled:August 27, 201912:40Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP101TDS

AP1-01				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	255	1.50	0.114	mg/L	8/30/19 16:24	BB	
Fluoride by IC EPA 300.0	Less than PQL	0.30	0.024	mg/L	8/30/19 16:24	BB	
pH by SM4500HB(2011) Holding Time of 15 minute	6.67 s has been exceed	led.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	1.94	1.50	0.189	mg/L	8/30/19 16:24	BB	
Total Alkalinity by SM2320B	158	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	603	2.0	2.0	mg/L	9/3/19 10:01	PRC	

Approved By:



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Sample ID: BA07055

Wateree Well AP1-11 (NPDES/CCR)

Date & Time Sampled:August 27, 201913:50Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP11TDS

AP1-11				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	128	1.00	0.076	mg/L	8/30/19 16:24	BB	
Fluoride by IC EPA 300.0	0.82	0.20	0.016	mg/L	8/30/19 16:24	BB	
pH by SM4500HB(2011) Holding Time of 15 minutes h	6.55 has been excee	eded.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	68.0	1.00	0.126	mg/L	8/30/19 16:24	BB	
Total Alkalinity by SM2320B	111	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	463	2.0	2.0	mg/L	9/3/19 10:01	PRC	

Approved By: _



Rocky Archer

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September 04, 2019

REPORT TO:

Sample ID: BA07056

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled:August 27, 201913:54Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP102TDS

AP1-02				Login Record File: 190829001				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist		
Chlorides by IC EPA 300.0	38.7	0.50	0.038	mg/L	8/30/19 16:24	BB		
Fluoride by IC EPA 300.0	0.18	0.10	0.008	mg/L	8/30/19 16:24	BB		
pH by SM4500HB(2011) Holding Time of 15 minute	6.58 s has been exceed	led.		S.U.	9/4/19 12:09	PRC		
Sulfates by IC EPA 300.0	Less than PQL	0.50	0.063	mg/L	8/30/19 16:24	BB		
Total Alkalinity by SM2320B	132	0.50	0.50	mg/L	9/4/19 12:09	PRC		
Total Dissolved Solid-SM2540C	340	2.0	2.0	mg/L	9/3/19 10:01	PRC		

Approved By:



Rocky Archer

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September 04, 2019

REPORT TO:

Sample ID: BA07057

Wateree Well AP1-11D (NPDES/CCR)

Date & Time Sampled:August 27, 201914:35Date & Time Submitted:August 28, 201915:39Collected by:A.HILLLocation Code:WAAP11DTDS

AP1-11D				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	16.1	0.50	0.038	mg/L	8/30/19 16:24	BB	
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	8/30/19 16:24	BB	
pH by SM4500HB(2011) Holding Time of 15 minute	6.35 s has been exceed	led.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	78.2	0.50	0.063	mg/L	8/30/19 16:24	BB	
Total Alkalinity by SM2320B	81.2	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	191	2.0	2.0	mg/L	9/3/19 10:01	PRC	

Approved By:



Rocky Archer

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September 04, 2019

REPORT TO:

Sample ID: BA07058

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled:August 27, 201915:00Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP103TDS

			Login Record File: 190829001			
Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
73.2	0.50	0.038	mg/L	8/30/19 16:24	BB	
0.42	0.10	0.008	mg/L	8/30/19 16:24	BB	
6.46 has been excee	eded.		S.U.	9/4/19 12:09	PRC	
68.8	0.50	0.063	mg/L	8/30/19 16:24	BB	
153	0.50	0.50	mg/L	9/4/19 12:09	PRC	
466	2.0	2.0	mg/L	9/3/19 10:01	PRC	
	73.2 0.42 6.46 has been excee 68.8 153	Result Limit(PQL) 73.2 0.50 0.42 0.10 6.46	Result Limit(PQL) Limit(MDL) 73.2 0.50 0.038 0.42 0.10 0.008 6.46	ResultReporting Limit(PQL)Detection Limit(MDL)Units73.20.500.038mg/L0.420.100.008mg/L6.46 has been exceeded.S.U.68.80.500.063mg/L1530.500.50mg/L	Result Reporting Limit(PQL) Detection Limit(MDL) Units Completed Analysis Date & Time 73.2 0.50 0.038 mg/L 8/30/19 16:24 0.42 0.10 0.008 mg/L 8/30/19 16:24 6.46 S.U. 9/4/19 12:09 68.8 0.50 0.063 mg/L 8/30/19 16:24 153 0.50 0.50 mg/L 9/4/19 12:09	

ph Approved By:



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Sample ID: BA07059

Wateree Well AP1-11D2 (NPDES/CCR)

Date & Time Sampled:August 27, 201915:30Date & Time Submitted:August 28, 201915:39Collected by:A.HILLLocation Code:WAAP11D2TDS

AP1-11D				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	10.9	0.50	0.038	mg/L	8/30/19 16:24	BB	
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	8/30/19 16:24	BB	
pH by SM4500HB(2011) Holding Time of 15 minute	5.91 s has been exceed	led.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	27.2	0.50	0.063	mg/L	8/30/19 16:24	BB	
Total Alkalinity by SM2320B	54.2	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	86	2.0	2.0	mg/L	9/3/19 10:01	PRC	

Approved By:



Rocky Archer

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September 04, 2019

Sample ID: BA07060

Wateree Well AP1-03D (NPDES/CCR)

Date & Time Sampled: August 27, 2019 16:05 Date & Time Submitted: August 28, 2019 15:39 Location Code: WAAP103DTDS Collected by: A.HILL

AP1-03D				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	23.9	0.50	0.038	mg/L	8/30/19 16:24	BB	
Fluoride by IC EPA 300.0	0.23	0.10	0.008	mg/L	8/30/19 16:24	BB	
pH by SM4500HB(2011) Holding Time of 15 minutes h	6.31 has been excee	eded.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	85.3	0.50	0.063	mg/L	8/30/19 16:24	BB	
Total Alkalinity by SM2320B	78.3	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	231	2.0	2.0	mg/L	9/3/19 10:01	PRC	

Approved By:

REPORT TO:



Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07061

Wateree Well AP1-10 (NPDES/CCR)

Date & Time Sampled:August 27, 201917:20Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP10TDS

AP1-10				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	134	1.00	0.076	mg/L	8/30/19 22:18	BB	
Fluoride by IC EPA 300.0	0.48	0.20	0.016	mg/L	8/30/19 22:18	BB	
pH by SM4500HB(2011) Holding Time of 15 minutes h	6.60 has been excee	eded.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	49.2	1.00	0.126	mg/L	8/30/19 22:18	BB	
Total Alkalinity by SM2320B	162	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	468	2.0	2.0	mg/L	9/3/19 10:01	PRC	

Approved By:



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 05, 2019

REPORT TO:

Sample ID: BA07071

Wateree Well AP1-01A (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation C

8, 2019 10:37 8, 2019 15:39 Location Code: WAAP101ATDS

AP1-01				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	5.25	0.50	0.038	mg/L	8/29/19 22:09	BB	
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	8/29/19 22:09	BB	
pH by SM4500HB(2011) Holding Time of 15 minute	4.88 s has been exceed	led.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	Less than PQL	0.50	0.063	mg/L	8/29/19 22:09	BB	
Total Alkalinity by SM2320B	5.4	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	43	2.0	2.0	mg/L	9/3/19 10:01	PRC	

popul Approved By: _



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Sample ID: BA07072

Wateree Well AP1-03D2 (NPDES/CCR)

Date & Time Sampled:August 28, 201910:45Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP103D2TDS

AP1-03D				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	18.3	0.50	0.038	mg/L	8/29/19 22:09	BB	
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	8/29/19 22:09	BB	
pH by SM4500HB(2011) Holding Time of 15 minute	5.97 s has been exceed	ed.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	70.0	0.50	0.063	mg/L	8/29/19 22:09	BB	
Total Alkalinity by SM2320B	22.7	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	120	2.0	2.0	mg/L	9/3/19 10:01	PRC	

The Approved By:



Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Sample ID: BA07073

Wateree Well AP1-12 (NPDES/CCR)

August 28, 2019 Date & Time Sampled: 11:38 Date & Time Submitted: August 28, 2019 15:39 Collected by: A.HILL Location Code: WAAP112TDS

AP1-12					Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist		
Chlorides by IC EPA 300.0	22.2	1.50	0.114	mg/L	8/30/19 16:24	BB		
Fluoride by IC EPA 300.0	1.51	0.30	0.024	mg/L	8/30/19 16:24	BB		
pH by SM4500HB(2011) Holding Time of 15 minutes h	6.97 nas been excee	eded.		S.U.	9/4/19 12:09	PRC		
Sulfates by IC EPA 300.0	79.9	1.50	0.189	mg/L	8/30/19 16:24	BB		
Total Alkalinity by SM2320B	270	0.50	0.50	mg/L	9/4/19 12:09	PRC		
Total Dissolved Solid-SM2540C	162	2.0	2.0	mg/L	9/3/19 10:01	PRC		

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By:

Han

Rocky Archer

Rashida Marlowe



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Sample ID: BA07074

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled:August 28, 201912:00Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP104TDS

AP1-04					Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist		
Chlorides by IC EPA 300.0	17.2	0.50	0.038	mg/L	8/30/19 16:24	BB		
Fluoride by IC EPA 300.0	0.27	0.10	0.008	mg/L	8/30/19 16:24	BB		
pH by SM4500HB(2011) Holding Time of 15 minute	6.65 s has been exceed	led.		S.U.	9/4/19 12:09	PRC		
Sulfates by IC EPA 300.0	Less than PQL	0.50	0.063	mg/L	8/30/19 16:24	BB		
Total Alkalinity by SM2320B	477	0.50	0.50	mg/L	9/4/19 12:09	PRC		
Total Dissolved Solid-SM2540C	439	2.0	2.0	mg/L	9/3/19 10:01	PRC		

Approved By:



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 04, 2019

REPORT TO:

Sample ID: BA07075

Wateree Well AP1-13 (NPDES/CCR)

Date & Time Sampled: August 28, 2019 12:34 Date & Time Submitted: August 28, 2019 15:39 Collected by: A.HILL Location Code: WAAP13TDS

AP1-12				Login Record File: 190829001			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Chlorides by IC EPA 300.0	22.7	3.00	0.228	mg/L	8/30/19 16:24	BB	
Fluoride by IC EPA 300.0	Less than PQL	0.30	0.024	mg/L	8/30/19 16:24	BB	
pH by SM4500HB(2011) Holding Time of 15 minute	5.97 s has been exceed	ed.		S.U.	9/4/19 12:09	PRC	
Sulfates by IC EPA 300.0	153	3.00	0.378	mg/L	8/30/19 16:24	BB	
Total Alkalinity by SM2320B	184	0.50	0.50	mg/L	9/4/19 12:09	PRC	
Total Dissolved Solid-SM2540C	417	2.0	2.0	mg/L	9/3/19 10:01	PRC	

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By:

In



Rocky Archer

REPORT TO:

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 12, 2019

Sample ID: BA07076

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled:August 27, 201912:40Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP101TM

AP1-01			Login Record File: 190829002			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_MS 200.8	Less Than PQL	1.0	0.292	ppb	9/4/19 08:04	MC
Barium by ICP-OES 200.7	267	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	2260	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	68900	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	Less than PQL	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	25100	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	3.5	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	9830	1000	310	ppb	9/5/19 09:06	МС
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:04	МС
Sodium EPA 200.7	55300	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 08:04	MC
Labworks Standard Report	and a second contraction of other ages in his accurate	and the second second second second second	 	annag dala akaran bar, ara a da ,	Page 1 of 2	an a santa dhu ya ta sha na sashkarana

Labworks Standard Report



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If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: _____hillip Capers____



Tel: (803)217-9384 Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07077

Wateree Well AP1-11 TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

7, 2019 13:50 8, 2019 15:39 Location Code: WAAP11TM

AP1-11			Login Record File: 190829002			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_OES 200.7	874	20.0	4.104	ppb	9/5/19 10:07	MC
Barium by ICP-OES 200.7	175	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	1720	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	75000	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	84.7	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	15100	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	33.2	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	8380	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	44300	1000	254	ppb	9/5/19 09:06	МС
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 08:04	МС
Labworks Standard Report	er – en anderen ander en en anderen en anderen en anderen anderen anderen anderen en anderen anderen anderen an	formen also for the second second second	aan aasaa oo haado fada assaatiisa — iid fada (1998)		Page 1 of 2	a a a ser a se

Labworks Standard Report



If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: Phillip Capers



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384 Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07079

Wateree Well AP1-11D TM (NPDES/CCR)

Date & Time Sampled:August 27, 201914Date & Time Submitted:August 28, 201914Collected by: A.HILLLocation Code

7, 2019 14:35 8, 2019 15:39 Location Code: WAAP11DTM

AP1-11D				ecord File: 19082900	190829002	
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_OES 200.7	222	20.0	4.104	ppb	9/5/19 10:07	MC
Barium by ICP-OES 200.7	71.7	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less Than PQL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	548	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less Than PQL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	26000	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less than PQL	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	8.9	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	14.6	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	5380	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	Less Than PQL	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	5030	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	21500	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less Than PQL	0.5	0.071	ppb	9/4/19 08:04	MC
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Labworks Standard Report



If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: Phillip Copen



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07080

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled:August 27, 201915:00Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP103TM

AP1-03 Login Record File: 190829002 CERTIFIED BY SCDHEC Reporting Detection **Completed Analysis** Result Units Chemist Limit(MDL) (LAB ID 32006): Limit(PQL) Date & Time Antimony by ICP-MS 200.8 Less than PQL 1.0 0.090 9/4/19 08:04 ppb MC Arsenic by ICP_OES 200.7 600 20.0 4.104 ppb 9/5/19 10:07 MC Barium by ICP-OES 200.7 188 10.0 1.113 ppb 9/5/19 09:06 MC Beryllium EPA 200.7 Less than PQL 2.0 0.148 9/5/19 09:06 MC ppb Boron - EPA 200.7 937 200 38.458 9/5/19 09:06 ppb MC Cadmium by ICP_MS EPA 200.8 Less than PQL 1.0 0.035 ppb 9/4/19 08:04 MC Calcium EPA 200.7 64600 500 83.8 ppb 9/5/19 09:06 MC Chromium by ICP MS 200.8 Less Than PQL 1.0 0.345 9/4/19 08:04 MC ppb Cobalt by ICP MS 200.8 Less Than PQL 1.0 0.072 9/4/19 08:04 ppb MC Lead by ICP-MS 200.8 Less Than PQL 1.0 0.085 9/4/19 08:04 MC ppb Lithium (CWA) 200.7 32.7 2.0 0.758 ppb 9/5/19 09:06 MC Magnesium EPA 200.7 12700 50 18.7 9/5/19 09:06 MC ppb Mercury (CWA) by EPA 245.2 Less than PQL 0.2 0.071 PRC ppb 9/12/19 11:01 Molybdenum - EPA 200.8 10.4 1.0 0.111 9/4/19 08:04 MC ppb Potassium EPA 200.7 7140 1000 310 9/5/19 09:06 MC ppb Selenium by ICP-MS 200.8 Less than PQL 2.06 5.0 ppb 9/4/19 08:04 MC Sodium EPA 200.7 32000 1000 254 9/5/19 09:06 ppb MC Thallium by ICP-MS 200.8 Less than PQL 0.5 0.071 9/4/19 08:04 ppb MC

Labworks Standard Report



If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: -Phillip Copus



Fax: (803)217-9384

September 12, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07081

Wateree Well AP1-11D2 TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

7, 2019 15:30 8, 2019 15:39 Location Code: WAAP11D2TM

AP1-11D		Login Record File: 19082900				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less Than PQL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_MS 200.8	1.6	1.0	0.292	ppb	9/4/19 08:04	MC
Barium by ICP-OES 200.7	160	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	2.4	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	Less Than PQL	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less Than PQL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	2260	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	5.8	1.0	0.072	ppb	9/4/19 08:04	МС
Lead by ICP-MS 200.8	1.2	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	17.5	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	999	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	Less Than PQL	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	5420	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	12600	1000	254	ppb	9/5/19 09:06	МС
Thallium by ICP-MS 200.8	Less Than PQL	0.5	0.071	ppb	9/4/19 08:04	МС
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Approved By: -Phillip Capuz



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07082

Wateree Well AP1-03D TM (NPDES/CCR)

Date & Time Sampled:August 27, 201916:05Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP103DTM

AP1-03D		Login Record File: 190829002				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_OES 200.7	971	20.0	4.104	ppb	9/5/19 10:07	МС
Barium by ICP-OES 200.7	54.1	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 09:06	МС
Boron - EPA 200.7	775	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	35100	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less than PQL	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	3.7	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	5.0	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	7210	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	21.8	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	6350	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	24700	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less Than PQL	0.5	0.071	ppb	9/4/19 08:04	MC

Labworks Standard Report



Approved By: -Phillip Copen



Fax: (803) 217-9304

September 12, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07083

Wateree Well AP1-10 TM (NPDES/CCR)

Date & Time Sampled:August 27, 201917:20Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP10TM

AP1-10	Login Record File: 190829002					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_OES 200.7	264	20.0	4.104	ppb	9/5/19 10:07	MC
Barium by ICP-OES 200.7	168	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	1430	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	60200	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	2.0	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less Than PQL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	40.9	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	17400	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	17.0	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	7510	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:04	МС
Sodium EPA 200.7	39800	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 08:04	MC
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Labworks Standard Report



Approved By: -Phillip Copus



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9304

September 12, 2019

REPORT TO:

Sample ID: BA07093

Wateree Well AP1-01A TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

8, 2019 10:37 8, 2019 15:39 Location Code: WAAP101ATM

AP1-01				Login Record File: 190829002				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist		
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:40	MC		
Arsenic by ICP_MS 200.8	Less than PQL	1.0	0.292	ppb	9/4/19 08:40	MC		
Barium by ICP-OES 200.7	48.3	10.0	1.113	ppb	9/5/19 09:06	MC		
Beryllium EPA 200.7	Less Than PQL	2.0	0.148	ppb	9/5/19 09:06	MC		
Boron - EPA 200.7	Less Than PQL	200	38.458	ppb	9/5/19 09:06	MC		
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 08:40	MC		
Calcium EPA 200.7	529	500	83.8	ppb	9/5/19 09:06	MC		
Chromium by ICP_MS 200.8	Less than PQL	1.0	0.345	ppb	9/4/19 08:40	MC		
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 08:40	MC		
Lead by ICP-MS 200.8	1.28	1.0	0.085	ppb	9/4/19 08:40	MC		
Lithium (CWA) 200.7	Less Than PQL	2.0	0.758	ppb	9/5/19 09:06	MC		
Magnesium EPA 200.7	924	50	18.7	ppb	9/5/19 09:06	MC		
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC		
Molybdenum - EPA 200.8	Less than PQL	1.0	0.111	ppb	9/4/19 08:40	MC		
Potassium EPA 200.7	Less Than PQL	1000	310	ppb	9/5/19 09:06	MC		
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:40	MC		
Sodium EPA 200.7	3010	1000	254	ppb	9/5/19 09:06	MC		
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 08:40	MC		
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Labworks Standard Report



Approved By: -Phillip Copun



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07094

Wateree Well AP1-03D2 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

8, 2019 10:45 8, 2019 15:39 Location Code: WAAP103D2TM

AP1-03D		Login Record File: 190829002				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:40	MC
Arsenic by ICP_MS 200.8	Less Than PQL	1.0	0.292	ppb	9/4/19 08:40	MC
Barium by ICP-OES 200.7	45.8	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less Than PQL	2.0	0.148	ppb	9/5/19 09:06	МС
Boron - EPA 200.7	600	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less Than PQL	1.0	0.035	ppb	9/4/19 08:40	MC
Calcium EPA 200.7	11500	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less than PQL	1.0	0.345	ppb	9/4/19 08:40	МС
Cobalt by ICP_MS 200.8	11.8	1.0	0.072	ppb	9/4/19 08:40	MC
Lead by ICP-MS 200.8	Less Than PQL	<u> </u>	0.085	ppb	9/4/19 08:40	MC
Lithium (CWA) 200.7	13.4	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	2750	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	Less Than PQL	1.0	0.111	ppb	9/4/19 08:40	MC
Potassium EPA 200.7	5480	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:40	MC
Sodium EPA 200.7	26600	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	0.564	0.5	0.071	ppb	9/4/19 08:40	MC
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Labworks Standard Report



Approved By: -Phillip Copum



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07095

Wateree Well AP1-12 TM (NPDES/CCR)

Date & Time Sampled:August 28, 201911:30Date & Time Submitted:August 28, 201915:39Collected by: A.HILLLocation Code:WAAP12TM

AP1-12	Login Record File: 190829002					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 08:40	MC
Arsenic by ICP_OES 200.7	271	20.0	4.104	ppb	9/5/19 10:07	MC
Barium by ICP-OES 200.7	150	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	1740	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less Than PQL	1.0	0.035	ppb	9/4/19 08:40	MC
Calcium EPA 200.7	93000	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less than PQL	1.0	0.345	ppb	9/4/19 08:40	MC
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 08:40	MC
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 08:40	MC
Lithium (CWA) 200.7	12.7	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	11600	50	18.7 [.]	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	49.0	1.0	0.111	ppb	9/4/19 08:40	MC
Potassium EPA 200.7	10600	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 08:40	MC
Sodium EPA 200.7	19400	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 08:40	MC
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Labworks Standard Report



Approved By: ______



Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07076

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

7, 2019 12:40 8, 2019 15:39 Location Code: WAAP101TM

AP1-01			Login Record File: 190829002			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_MS 200.8	0.43 (J)	1.0	0.292	ppb	9/4/19 08:04	MC
Barium by ICP-OES 200.7	267	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	2260	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	68900	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	0.49 (J)	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	0.08 (J)	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less than MDL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	25100	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	3.5	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	9830	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	55300	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 08:04	МС
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Labworks "J value" Report



Sample ID: BA07076 September 12, 2019

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

Approved By: Minhell Com



Rocky Archer

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Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07077

Wateree Well AP1-11 TM (NPDES/CCR)

1

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

7, 2019 13:50 8, 2019 15:39 Location Code: WAAP11TM

AP1-11			Login Record File: 190829002			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_OES 200.7	874	20.0	4.104	ppb	9/5/19 10:07	MC
Barium by ICP-OES 200.7	175	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	1720	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	75000	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	0.40 (J)	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	0.99 (J)	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less than MDL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	84.7	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	15100	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9)12/19 11:01	PRC
Molybdenum - EPA 200.8	33.2	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	8380	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	44300	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 08:04	MC
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Labworks "J value" Report



Sample ID: BA07077 September 12, 2019

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

If there are any questions concerning this sample, please contact the lab at (803) 217-9384. Approved By: Mille Cher



Fax: (803) 217-9911

September 10, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07078

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocatio

August 27, 2019 13:54 August 28, 2019 15:39 Location Code: WAAP102TM

AP1-02

Login Record File: 190829002

	Limit(PQL)	Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Less than PQL	1.0	0.090	ppb	9/4/19 08:04	MC
55.8	1.0	0.292	ppb	9/4/19 08:04	MC
183	10.0	1.113	ppb	9/5/19 09:06	MC
Less than PQL	2.0	0.148	ppb	9/5/19 09:06	MC
595	200	38.458	ppb	9/5/19 09:06	MC
Less than PQL	1.0	0.035	ppb	9/4/19 08:04	MC
44500	500	83.8	ppb	9/5/19 09:06	MC
Less Than PQL	1.0	0.345	ppb	9/4/19 08:04	MC
Less Than PQL	1.0	0.072	ррb	9/4/19 08:04	MC
Less than PQL	1.0	0.085	ppb	9/4/19 08:04	MC
2.0	2.0	0.758	ppb	9/5/19 09:06	MC
15800	50	18.7	ppb	9/5/19 09:06	MC
Less than PQL	0.2	0.071	ppb	9/10/19 16:00	PRC
7.6	1.0	0.111	ppb	9/4/19 08:04	MC
5500	1000	310	ppb	9/5/19 09:06	MC
Less than PQL	5.0	2.06	ppb	9/4/19 08:04	МС
25500	1000	254	ppb	9/5/19 09:06	MC
Less than PQL	0.5	0.071	ppb	9/4/19 08:04	MC
	55.8 183 Less than PQL 595 Less than PQL 44500 Less Than PQL Less Than PQL 2.0 15800 Less than PQL 7.6 5500 Less than PQL 25500	55.8 1.0 183 10.0 Less than PQL 2.0 595 200 Less than PQL 1.0 44500 500 Less Than PQL 1.0 Less than PQL 0.2 7.6 1.0 Less than PQL 0.2 7.6 1.0 Less than PQL 5.0 25500 1000	55.81.00.29218310.01.113Less than PQL2.00.14859520038.458Less than PQL1.00.0354450050083.8Less Than PQL1.00.345Less Than PQL1.00.072Less than PQL1.00.072Less than PQL1.00.072Less than PQL1.00.072Less than PQL1.00.0758158005018.7Less than PQL0.20.0717.61.00.11155001000310Less than PQL5.02.06255001000254	55.8 1.0 0.292 ppb 183 10.0 1.113 ppb Less than PQL 2.0 0.148 ppb 595 200 38.458 ppb Less than PQL 1.0 0.035 ppb 44500 500 83.8 ppb Less Than PQL 1.0 0.345 ppb Less Than PQL 1.0 0.072 ppb Less Than PQL 1.0 0.072 ppb Less than PQL 1.0 0.085 ppb 2.0 2.0 0.758 ppb 15800 50 18.7 ppb 15800 50 18.7 ppb 7.6 1.0 0.111 ppb 5500 1000 310 ppb Less than PQL 5.0 2.06 ppb 25500 1000 254 ppb	55.81.00.292ppb9/4/1908:0418310.01.113ppb9/5/1909:06Less than PQL2.00.148ppb9/5/1909:0659520038.458ppb9/5/1909:06Less than PQL1.00.035ppb9/4/1908:044450050083.8ppb9/5/1909:06Less Than PQL1.00.345ppb9/4/1908:04Less Than PQL1.00.072ppb9/4/1908:04Less Than PQL1.00.072ppb9/4/1908:04Less than PQL1.00.072ppb9/4/1908:04Less than PQL1.00.072ppb9/4/1908:04Less than PQL1.00.071ppb9/5/1909:06158005018.7ppb9/5/1909:06Less than PQL0.20.071ppb9/10/1916:007.61.00.111ppb9/4/1908:0455001000310ppb9/5/1909:06Less than PQL5.02.06ppb9/4/1908:0455001000254ppb9/5/1909:06

Labworks Standard Report



Approved By: Phillip Caputz



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07079

Wateree Well AP1-11D TM (NPDES/CCR)

Date & Time Sampled: August 27, 2019 Date & Time Submitted: August 28, 2019 Collected by: A.HILL

14:35 15:39 Location Code: WAAP11DTM

AP1-11D				Login Record File: 190829002				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)		Units	Completed Analysis Date & Time	Chemist		
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 08:04	MC		
Arsenic by ICP_OES 200.7	222	20.0	4.104	ppb	9/5/19 10:07	MC		
Barium by ICP-OES 200.7	71.7	10.0	1.113	ppb	9/5/19 09:06	MC		
Beryllium EPA 200.7	0.48 (J)	2.0	0.148	ppb	9/5/19 09:06	MC		
Boron - EPA 200.7	548	200	38.458	ppb	9/5/19 09:06	MC		
Cadmium by ICP_MS EPA 200.8	0.04 (J)	1.0	0.035	ppb	9/4/19 08:04	MC		
Calcium EPA 200.7	26000	500	83.8	ррр	9/5/19 09:06	MC		
Chromium by ICP_MS 200.8	Less than MDL	1.0	0.345	ppb	9/4/19 08:04	MC		
Cobalt by ICP_MS 200.8	8.9	1.0	0.072	ppb	9/4/19 08:04	MC		
Lead by ICP-MS 200.8	Less than MDL	1.0	0.085	ppb	9/4/19 08:04	MC		
Lithium (CWA) 200.7	14.6	2.0	0.758	ppb	9/5/19 09:06	MC		
Magnesium EPA 200.7	5380	50	18.7	ppb	9/5/19 09:06	MC		
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19 11:01	PRC		
Molybdenum - EPA 200.8	0.65 (J)	1.0	0.111	ppb	9/4/19 08:04	MC		
Potassium EPA 200.7	5030	1000	310	ppb	9/5/19 09:06	MC		
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:04	MC		
Sodium EPA 200.7	21500	1000	254	ppb	9/5/19 09:06	MC		
Thallium by ICP-MS 200.8	0.22 (J)	0.5	0.071	ppb	9/4/19 08:04	MC		
Labworks "J value" Report	n an an ann an Ann an Arland an an Ann an				Page 1 of 2			

Labworks "J value" Report



A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

1 lela Approved By:



Fax: (803) 217-9304

September 12, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07080

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

7, 2019 15:00 8, 2019 15:39 Location Code: WAAP103TM

AP1-03	Login Record File: 190829002					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)		Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 08:04	MC
Arsenic by ICP_OES 200.7	600	20.0	4.104	ppb	9/5/19 10:07	MC
Barium by ICP-OES 200.7	188	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	937	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	64600	500	83.8	ppb	9/5/19 09:06	МС
Chromium by ICP_MS 200.8	0.45 (J)	1.0	0.345	ppb	9/4/19 08:04	МС
Cobalt by ICP_MS 200.8	0.18 (J)	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	0.11 (J)	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	32.7	2.0	0.758	ppb	9/5/19 09:06	МС
Magnesium EPA 200.7	12700	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	10.4	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	7140	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	32000	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 08:04	MC
Labworks "J value" Report	e a data di ana any serieta di serieta na administrativa del serieta di administra	an ay may na sa ay ang	n - Handan y Franciski konstruktion (h. 1997) (h. 1998) - A	-1.9. (9)=1. (0, 1.9.)(1.0. (9)(0, 9)	Page 1 of 2	



A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

Approved By: ______ P



Fax: (803) 217-9911

September 12, 2019

Sample ID: BA07081

REPORT TO:

Rashida Marlowe

Rocky Archer

Wateree Well AP1-11D2 TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

7, 2019 15:30 8, 2019 15:39 Location Code: WAAP11D2TM

AP1-11D			Login Record File: 190829002				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Antimony by ICP-MS 200.8	0.12 (J)	1.0	0.090	ppb	9/4/19 08:04	MC	
Arsenic by ICP_MS 200.8	1.6	1.0	0.292	ppb	9/4/19 08:04	MC	
Barium by ICP-OES 200.7	160	10.0	1.113	ppb	9/5/19 09:06	MC	
Beryllium EPA 200.7	2.4	2.0	0.148	ppb	9/5/19 09:06	MC	
Boron - EPA 200.7	118.00 (J)	200	38.458	ppb	9/5/19 09:06	MC	
Cadmium by ICP_MS EPA 200.8	0.05 (J)	1.0	0.035	ppb	9/4/19 08:04	MC	
Calcium EPA 200.7	2260	500	83.8	ppb	9/5/19 09:06	MC	
Chromium by ICP_MS 200.8	0.55 (J)	1.0	0.345	ppb	9/4/19 08:04	MC	
Cobalt by ICP_MS 200.8	5.8	1.0	0.072	ppb	9/4/19 08:04	MC	
Lead by ICP-MS 200.8	1.2	1.0	0.085	ppb	9/4/19 08:04	MC	
Lithium (CWA) 200.7	17.5	2.0	0.758	ppb	9/5/19 09:06	MC	
Magnesium EPA 200.7	999	50	18.7	ppb	9/5/19 09:06	MC	
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19 11:01	PRC	
Molybdenum - EPA 200.8	0.14 (J)	1.0	0.111	ppb	9/4/19 08:04	MC	
Potassium EPA 200.7	5420	1000	310	ppb	9/5/19 09:06	MC	
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:04	MC	
Sodium EPA 200.7	12600	1000	254	ppb	9/5/19 09:06	MC	
Thallium by ICP-MS 200.8	0.29 (J)	0.5	0.071	ppb	9/4/19 08:04	MC	

Labworks "J value" Report



Sample ID: BA07081 September 12, 2019

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

Approved By: // illo



Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07082

Wateree Well AP1-03D TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocatio

7, 2019 16:05 8, 2019 15:39 Location Code: WAAP103DTM

AP1-03D

Rashida Marlowe

Rocky Archer

Login Record File: 190829002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 08:04	МС
Arsenic by ICP_OES 200.7	971	20.0	4.104	ppb	9/5/19 10:07	МС
Barium by ICP-OES 200.7	54.1	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	775	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	35100	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less than MDL	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	3.7	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	Less than MDL	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	5.0	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	7210	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	21.8	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	6350	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	24700	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	0.12 (J)	0.5	0.071	ppb	9/4/19 08:04	MC
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Labworks "J value" Report



Sample ID: BA07082 September 12, 2019

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

If there are any questions concerning this sample, please contact the lab at (803) 217-9384. Julello Cal

Approved By:



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07083

Wateree Well AP1-10 TM (NPDES/CCR)

Date & Time Sampled:August 27, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

7, 2019 17:20 8, 2019 15:39 Location Code: WAAP10TM

AP1-10			Record File: 19082900	File: 190829002		
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 08:04	МС
Arsenic by ICP_OES 200.7	264	20.0	4.104	ppb	9/5/19 10:07	МС
Barium by ICP-OES 200.7	168	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	1430	200	38.458	ppb	9/5/19 09:06	МС
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 08:04	MC
Calcium EPA 200.7	60200	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	0.44 (J)	1.0	0.345	ppb	9/4/19 08:04	MC
Cobalt by ICP_MS 200.8	2.0	1.0	0.072	ppb	9/4/19 08:04	MC
Lead by ICP-MS 200.8	0.09 (J)	1.0	0.085	ppb	9/4/19 08:04	MC
Lithium (CWA) 200.7	40.9	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	17400	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19 11:01	PRC
Molybdenum - EPA 200.8	17.0	1.0	0.111	ppb	9/4/19 08:04	MC
Potassium EPA 200.7	7510	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:04	MC
Sodium EPA 200.7	39800	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 08:04	MC
abworks " value" Report	ale die federal bewennen bewennen affikieren an einen ein	столько станутися со у практантания на	an Marine - Photographic and the action of the constraints	n - 2 Ann Shan, 1 2 Annat Mangarat (n. 1	Dage 1 of 2	

Labworks "J value" Report



A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By:

intelle



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07093

Wateree Well AP1-01A TM (NPDES/CCR)

Date & Time Sampled: Date & Time Submitted: August 28, 2019 Collected by: A.HILL

August 28, 2019 10:37 15:39 Location Code: WAAP101ATM

AP1-01		Login Record File: 190829002						
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist		
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 08:40	MC		
Arsenic by ICP_MS 200.8	Less than MDL	1.0	0.292	ppb	9/4/19 08:40	МС		
Barium by ICP-OES 200.7	48.3	10.0	1.113	ppb	9/5/19 09:06	MC		
Beryllium EPA 200.7	0.17 (J)	2.0	0.148	ppb	9/5/19 09:06	MC		
Boron - EPA 200.7	58.50 (J)	200	38.458	ppb	9/5/19 09:06	MC		
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 08:40	MC		
Calcium EPA 200.7	529	500	83.8	ppb	9/5/19 09:06	MC		
Chromium by ICP_MS 200.8	Less than MDL	1.0	0.345	ppb	9/4/19 08:40	MC		
Cobalt by ICP_MS 200.8	0.59 (J)	1.0	0.072	ppb	9/4/19 08:40	MC		
Lead by ICP-MS 200.8	1.28	1.0	0.085	ppb	9/4/19 08:40	MC		
Lithium (CWA) 200.7	1.30 (J)	2.0	0.758	ppb	9/5/19 09:06	MC		
Magnesium EPA 200.7	924	50	18.7	ppb	9/5/19 09:06	MC		
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19 11:01	PRC		
Molybdenum - EPA 200.8	Less than MDL	1.0	0.111	ppb	9/4/19 08:40	MC		
Potassium EPA 200.7	818.00 (J)	1000	310	ppb	9/5/19 09:06	MC		
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 08:40	MC		
Sodium EPA 200.7	3010	1000	254	ppb	9/5/19 09:06	MC		
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 08:40	MC		
Labworks "J value" Report	n na tanàna dia kaominina d		etana ana ti sena a artis da ana ta dan a		Page 1 of 2			



Sample ID: BA07093 September 12, 2019

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

Approved By: Muchel Car



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 12, 2019

REPORT TO:

. ._. . . .

Sample ID: BA07094

Wateree Well AP1-03D2 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation

8, 2019 10:45 8, 2019 15:39 Location Code: WAAP103D2TM

AP1-03D			Login Record File: 190829002					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Date &		Chemist	
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19	08:40	MC	
Arsenic by ICP_MS 200.8	0.35 (J)	1.0	0.292	ppb	9/4/19	08:40	MC	
Barium by ICP-OES 200.7	45.8	10.0	1.113	ppb	9/5/19	09:06	MC	
Beryllium EPA 200.7	1.20 (J)	2.0	0.148	ppb	9/5/19	09:06	MC	
Boron - EPA 200.7	600	200	38.458	ppb	9/5/19	09:06	МС	
Cadmium by ICP_MS EPA 200.8	0.21 (J)	1.0	0.035	ppb	9/4/19	08:40	MC	
Calcium EPA 200.7	11500	500	83.8	ppb	9/5/19	09:06	MC	
Chromium by ICP_MS 200.8	Less than MDL	1.0	0.345	ppb	9/4/19	08:40	MC	
Cobalt by ICP_MS 200.8	11.8	1.0	0.072	ppb	9/4/19	08:40	MC	
Lead by ICP-MS 200.8	0.26 (J)	1.0	0.085	ppb	9/4/19	08:40	MC	
Lithium (CWA) 200.7	13.4	2.0	0.758	ppb	9/5/19	09:06	MC	
Magnesium EPA 200.7	2750	50	18.7	ppb	9/5/19	09:06	MC	
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19	11:01	PRC	
Molybdenum - EPA 200.8	0.18 (J)	1.0	0.111	ppb	9/4/19	08:40	MC	
Potassium EPA 200.7	5480	1000	310	ppb	9/5/19		MC	
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	• ppb	9/4/19		MC	
Sodium EPA 200.7	26600	1000	254	ppb	9/5/19	09:06	MC	
Thallium by ICP-MS 200.8	0.564	0.5	0.071	ppb	9/4/19 (08:40	MC	
Labworks "J value" Report	a analisi seba na hara sakha seba na marika kata sa	en en de la companya	n an an star at the set of a selection of the		Pan	e 1 of 2		

Labworks "J value" Report



Sample ID: BA07094 September 12, 2019

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

Approved By:



Fax: (803) 217-9911

September 12, 2019

REPORT TO:

Sample ID: BA07095

Wateree Well AP1-12 TM (NPDES/CCR)

Date & Time Sampled: August 28, 2019 Date & Time Submitted: August 28, 2019 Collected by: A.HILL

11:30 15:39 Location Code: WAAP12TM

AP1-12			Login Record File: 190829002					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Date &		Chemist	
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19	08:40	MC	
Arsenic by ICP_OES 200.7	271	20.0	4.104	ppb	9/5/19	10:07	MC	
Barium by ICP-OES 200.7	150	10.0	1.113	ppb	9/5/19	09:06	MC	
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19	09:06	MC	
Boron - EPA 200.7	1740	200	38.458	ppb	9/5/19	09:06	MC	
Cadmium by ICP_MS EPA 200.8	0.04 (J)	1.0	0.035	ppb	9/4/19	08:40	MC	
Calcium EPA 200.7	93000	500	83.8	ppb	9/5/19	09:06	MC	
Chromium by ICP_MS 200.8	Less than MDL	1.0	0.345	ppb	9/4/19	08:40	MC	
Cobalt by ICP_MS 200.8	0.09 (J)	1.0	0.072	ppb	9/4/19	08:40	MC	
Lead by ICP-MS 200.8	Less than MDL	1.0	0.085	ppb	9/4/19	08:40	MC	
Lithium (CWA) 200.7	12.7	2.0	0.758	ppb	9/5/19	09:06	MC	
Magnesium EPA 200.7	11600	50	18.7	ppb	9/5/19	09:06	МС	
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/12/19	11:01	PRC	
Molybdenum - EPA 200.8	49.0	1.0	0.111	ppb	9/4/19(08:40	MC	
Potassium EPA 200.7	10600	1000	310	ppb	9/5/19(09:06	MC	
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 (08:40	MC	
Sodium EPA 200.7	19400	1000	254	ppb	9/5/19 (09:06	MC	
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 (08:40	MC	

Labworks "J value" Report

Rashida Marlowe **Rocky Archer**



A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

Approved By: Muldle Chr



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9304

September 10, 2019

REPORT TO:

Sample ID: BA07096

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocation Collected

8, 2019 12:08 8, 2019 15:39 Location Code: WAAP104TM

AP1-04

Login Record File: 190829002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 09:14	МС
Arsenic by ICP_MS 200.8	22.9	1.0	0.292	ppb	9/4/19 09:14	MC
Barium by ICP-OES 200.7	196	10.0	1.113	ppb	9/5/19 09:06	MC
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 09:06	MC
Boron - EPA 200.7	2560	200	38.458	ppb	9/5/19 09:06	MC
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 09:14	MC
Calcium EPA 200.7	117000	500	83.8	ppb	9/5/19 09:06	MC
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 09:14	MC
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 09:14	MC
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 09:14	MC
Lithium (CWA) 200.7	Less than PQL	2.0	0.758	ppb	9/5/19 09:06	MC
Magnesium EPA 200.7	22900	50	18.7	ppb	9/5/19 09:06	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/10/19 16:00	PRC
Molybdenum - EPA 200.8	Less Than PQL	1.0	0.111	ppb	9/4/19 09:14	MC
Potassium EPA 200.7	8710	1000	310	ppb	9/5/19 09:06	MC
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 09:14	MC
Sodium EPA 200.7	19400	1000	254	ppb	9/5/19 09:06	MC
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 09:14	MC
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Labworks Standard Report



Approved By: -Phillip Copen



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9304

September 10, 2019

REPORT TO:

Sample ID: BA07097

Wateree Well AP1-13 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 28, 2019Collected by: A.HILLLocatio

8, 2019 12:14 8, 2019 15:39 Location Code: WAAP13TM

AP	1-1	2

Login Record File: 190829002

AF 1-12									
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist			
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 09:14	MC			
Arsenic by ICP_OES 200.7	878	20.0	4.104	ppb	9/5/19 10:07	MC			
Barium by ICP-OES 200.7	93.5	10.0	1.113	ppb	9/5/19 09:06	MC			
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 09:06	MC			
Boron - EPA 200.7	467	200	38.458	ppb	9/5/19 09:06	MC			
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 09:14	MC			
Calcium EPA 200.7	35400	500	83.8	ppb	9/5/19 09:06	MC			
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 09:14	MC			
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 09:14	MC			
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 09:14	MC			
Lithium (CWA) 200.7	28.8	2.0	0.758	ppb	9/5/19 09:06	MC			
Magnesium EPA 200.7	9340	50	18.7	ppb	9/5/19 09:06	MC			
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/10/19 16:00	PRC			
Molybdenum - EPA 200.8	4.7	1.0	0.111	ppb	9/4/19 09:14	MC			
Potassium EPA 200.7	5670	1000	310	ppb	9/5/19 09:06	MC			
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 09:14	MC			
Sodium EPA 200.7	18400	1000	254	ppb	9/5/19 09:06	MC			
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 09:14	MC			
abworks Standard Dapart	n de ante de la dela nombre de la dela dela dela dela dela dela de	nin-yörnön alan höldör av döldadarrari ta nadar, sakan a	n de an Frincisch 1997 (gin yw fei blei yw en ef Algenen mewn aff ne Derinna raennawr.	en orenar oldenado por congener en p	na na 1 - 60	andonomican set sandon og Some			



Approved By: Phillip Copere



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 10, 2019

REPORT TO:

Sample ID: BA07117

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocation

8, 2019 13:35 9, 2019 14:40 Location Code: WAAP105TM

AP1-05			Login Record File: 190829006				
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 09:33	MC	
Arsenic by ICP_MS 200.8	Less Than PQL	1.0	0.292	ppb	9/4/19 09:33	MC	
Barium by ICP-OES 200.7	224	10.0	1.113	ppb	9/5/19 10:25	MC	
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 10:25	MC	
Boron - EPA 200.7	Less Than PQL	200	38.458	ppb	9/5/19 10:25	MC	
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 09:33	MC	
Calcium EPA 200.7	14400	500	83.8	ppb	9/5/19 10:25	MC	
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 09:33	MC	
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 09:33	МС	
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 09:33	MC	
Magnesium EPA 200.7	12600	50	18.7	ppb	9/5/19 10:25	MC	
Mercury (CWA) by EPA 245.2	0.52	0.2	0.071	ppb	9/10/19 16:00	PRC	
Molybdenum - EPA 200.8	Less than PQL	1.0	0.111	ppb	9/4/19 09:33	MC	
Nickel by ICP_MS 200.8	1.1	1.0	0.314	ppb	9/4/19 09:33	MC	
Potassium EPA 200.7	2020	1000	310	ppb	9/5/19 10:25	MC	
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 09:33	MC	
Sodium EPA 200.7	22200	1000	254	ppb	9/5/19 10:25	MC	
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 09:33	MC	
abworks Standard Penort	in en frankelige van de Britskel en stellingsforen frig soldele van die Britske wette Sing wie en gegenesse wet	anna, angkaran kanangi na kanani nga mana mila kata		ta ancientato nen encorrone a seu		the metric database in processing agramme property of p	



Approved By: Phillip Capue



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212

Tel: (803)217-9384 Fax: (803) 217-9911

September 10, 2019

REPORT TO:

Sample ID: BA07118

Wateree Well AP1-09 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocation

August 28, 2019 13:58 August 29, 2019 14:40 Location Code: WAAP109TM

AP1-09			Login Record File: 190829006			
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 09:33	MC
Arsenic by ICP_OES 200.7	2030	20.0	4.104	ppb	9/5/19 10:40	MC
Barium by ICP-OES 200.7	180	10.0	1.113	ppb	9/5/19 10:25	MC
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 10:25	MC
Boron - EPA 200.7	926	200	38.458	ppb	9/5/19 10:25	MC
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 09:33	MC
Calcium EPA 200.7	57100	500	83.8	ppb	9/5/19 10:25	MC
Chromium by ICP_MS 200.8	Less Than PQL	1.0	0.345	ppb	9/4/19 09:33	MC
Cobalt by ICP_MS 200.8	Less Than PQL	1.0	0.072	ppb	9/4/19 09:33	MC
Lead by ICP-MS 200.8	Less than PQL	1.0	0.085	ppb	9/4/19 09:33	MC
Magnesium EPA 200.7	12700	50	18.7	ppb	9/5/19 10:25	МС
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/10/19 16:00	PRC
Molybdenum - EPA 200.8	24.2	1.0	0.111	ppb	9/4/19 09:33	MC
Nickel by ICP_MS 200.8	1.5	1.0	0.314	ppb	9/4/19 09:33	MC
Potassium EPA 200.7	7070	1000	310	ppb	9/5/19 10:25	МС
Selenium by ICP-MS 200.8	Less than PQL	5.0	2.06	ppb	9/4/19 09:33	MC
Sodium EPA 200.7	32100	1000	254	ppb	9/5/19 10:25	MC
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 09:33	MC
	NAMES - AND ADDRESS AND ADDRESS - A DESCRIPTION AND ADDRESS ADDR	(2) For the second conservation data second seco	an a	en al construction de la construcción de la con Construcción de la construcción de	in the paint of the test of test o	n Marchandon - Marthadol Jonard Jonatha Januar Div



Approved By: -Phillip Capers



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 10, 2019

REPORT TO:

Sample ID: BA07119

Wateree Well AP1-08 TM (NPDES/CCR)

Date & Time Sampled: August 28, 2019 14:50 Date & Time Submitted: August 29, 2019 Collected by: A.HILL

14:40 Location Code: WAAP108TM

AP1-01						
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 09:40	MC
Arsenic by ICP_MS 200.8	2.9	1.0	0.292	ppb	9/4/19 09:40	МС
Barium by ICP-OES 200.7	224	10.0	1.113	ppb	9/5/19 10:25	MC
Beryllium EPA 200.7	Less Than PQL	2.0	0.148	ppb	9/5/19 10:25	MC
Boron - EPA 200.7	200	200	38.458	ppb	9/5/19 10:25	МС
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 09:40	MC
Calcium EPA 200.7	17300	500	83.8	ppb	9/5/19 10:25	МС
Chromium by ICP_MS 200.8	1.3	1.0	0.345	ppb	9/4/19 09:40	MC
Cobalt by ICP_MS 200.8	Less Than PQL	2.0	0.144	ppb	9/6/19 15:13	MC
Lead by ICP-MS 200.8	Less Than PQL	1.0	0.085	ppb	9/4/19 09:40	MC
Magnesium EPA 200.7	19500	50	18.7	ppb	9/5/19 10:25	MC
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/10/19 16:00	PRC
Molybdenum - EPA 200.8	Less Than PQL	1.0	0.111	ppb	9/4/19 09:40	MC
Nickel by ICP_MS 200.8	2.8	1.0	0.314	ppb	9/4/19 09:40	MC
Potassium EPA 200.7	3530	1000	310	ppb	9/5/19 10:25	MC
Selenium by ICP-MS 200.8	8.6	5.0	2.06	ppb	9/4/19 09:40	MC
Sodium EPA 200.7	18300	1000	254	ppb	9/5/19 10:25	MC
Thallium by ICP-MS 200.8	Less than PQL	0.5	0.071	ppb	9/4/19 09:40	MC
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Approved By: ______ Coper-



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9304

September 10, 2019

REPORT TO:

Sample ID: BA07120

Wateree Well AP1-09D TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocation

8, 2019 14:54 9, 2019 14:40 Location Code: WAAP109DTM

AP1-09D		Login Record File: 1908290					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist	
Antimony by ICP-MS 200.8	Less than PQL	1.0	0.090	ppb	9/4/19 09:40	MC	
Arsenic by ICP_MS 200.8	38.3	1.0	0.292	ppb	9/4/19 09:40	MC	
Barium by ICP-OES 200.7	38.6	10.0	1.113	ppb	9/5/19 10:25	MC	
Beryllium EPA 200.7	Less than PQL	2.0	0.148	ppb	9/5/19 10:25	MC	
Boron - EPA 200.7	931	200	38.458	ppb	9/5/19 10:25	MC	
Cadmium by ICP_MS EPA 200.8	Less than PQL	1.0	0.035	ppb	9/4/19 09:40	MC	
Calcium EPA 200.7	27800	500	83.8	ppb	9/5/19 10:25	МС	
Chromium by ICP_MS 200.8	Less than PQL	1.0	0.345	ppb	9/4/19 09:40	MC	
Cobalt by ICP_MS 200.8	17.4	1.0	0.072	ppb	9/6/19 15:13	MC	
Lead by ICP-MS 200.8	Less Than PQL	1.0	0.085	ppb	9/4/19 09:40	MC	
Magnesium EPA 200.7	5840	50	18.7	ppb	9/5/19 10:25	MC	
Mercury (CWA) by EPA 245.2	Less than PQL	0.2	0.071	ppb	9/10/19 16:00	PRC	
Molybdenum - EPA 200.8	Less Than PQL	1.0	0.111	ppb	9/4/19 09:40	MC	
Nickel by ICP_MS 200.8	16.7	1.0	0.314	ppb	9/4/19 09:40	MC	
Potassium EPA 200.7	7470	1000	310	ppb	9/5/19 10:25	MC	
Selenium by ICP-MS 200.8	5.7	5.0	2.06	ppb	9/4/19 09:40	MC	
Sodium EPA 200.7	26200	1000	254	ppb	9/5/19 10:25	MC	
Thallium by ICP-MS 200.8	0.51	0.5	0.071	ppb	9/4/19 09:40	MC	
abworks Standard Report	maaministaan on maanaa kaalaan ka siista saa saasaa ka saasaa sa saa saa saa sa	201. По с с ма живериски користории простояни, порада	**************************************	Neo ninen der nassendoparistensprotoros po	annan an sui hite chuichtean ann an	e antes estado e seconda de la constituía d	



Approved By: _______



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 17, 2019

REPORT TO:

Sample ID: BA07117

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocation

8, 2019 13:35 9, 2019 14:40 Location Code: WAAP105TM

AP1-05				Record File: 1908290	06	
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 09:33	MC
Arsenic by ICP_MS 200.8	0.79 (J)	1.0	0.292	ppb	9/4/19 09:33	MC
Barium by ICP-OES 200.7	224	10.0	1.113	ppb	9/5/19 10:25	MC
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 10:25	MC
Boron - EPA 200.7	186.00 (J)	200	38.458	ppb	9/5/19 10:25	MC
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 09:33	MC
Calcium EPA 200.7	14400	500	83.8	ppb	9/5/19 10:25	MC
Chromium by ICP_MS 200.8	0.69 (J)	1.0	0.345	ppb	9/4/19 09:33	MC
Cobalt by ICP_MS 200.8	0.57 (J)	1.0	0.072	ppb	9/4/19 09:33	MC
Lead by ICP-MS 200.8	Less than MDL	1.0	0.085	ppb	9/4/19 09:33	MC
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	9/17/19 14:59	MC
Magnesium EPA 200.7	12600	50	18.7	ppb	9/5/19 10:25	MC
Mercury (CWA) by EPA 245.2	0.52	0.2	0.071	ppb	9/10/19 16:00	PRC
Molybdenum - EPA 200.8	Less than MDL	1.0	0.111	ppb	9/4/19 09:33	MC
Nickel by ICP_MS 200.8	1.1	1.0	0.314	ppb	9/4/19 09:33	MC
Potassium EPA 200.7	2020	1000	310	ppb	9/5/19 10:25	MC
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 09:33	MC
Sodium EPA 200.7	22200	1000	254	ppb	9/5/19 10:25	MC
Labworks "J value" Report					Page 1 of 2	

Dominion Energy* Sample ID: September	r 17 2019	
	1112010	
CERTIFIED BY SCDHEC (LAB ID 32006): Result Reporting Limit(PQL) Detection Limit(MDL) Units Completed And Date & Tin		st

0.5

0.071

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Less than MDL

Approved By: Mishelli Com

ppb

9/4/19 09:33

MC

Thallium by ICP-MS 200.8



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9304

September 17, 2019

REPORT TO:

Sample ID: BA07118

Wateree Well AP1-09 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocation

8, 2019 13:58 9, 2019 14:40 Location Code: WAAP109TM

AP1-09	Login Record File: 190829006					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 09:33	MC
Arsenic by ICP_OES 200.7	2030	20.0	4.104	ppb	9/5/19 10:40	MC
Barium by ICP-OES 200.7	180	10.0	1.113	ppb	9/5/19 10:25	MC
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 10:25	MC
Boron - EPA 200.7	926	200	38.458	ppb	9/5/19 10:25	MC
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 09:33	MC
Calcium EPA 200.7	57100	500	83.8	ppb	9/5/19 10:25	MC
Chromium by ICP_MS 200.8	0.39 (J)	1.0	0.345	ppb	9/4/19 09:33	MC
Cobalt by ICP_MS 200.8	0.26 (J)	1.0	0.072	ppb	9/4/19 09:33	MC
Lead by ICP-MS 200.8	Less than MDL	1.0	0.085	ppb	9/4/19 09:33	MC
Lithium (CWA) 200.7	13.9	2.0	0.758	ppb	9/17/19 14:59	MC
Magnesium EPA 200.7	12700	50	18.7	ppb	9/5/19 10:25	MC
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/10/19 16:00	PRC
Molybdenum - EPA 200.8	24.2	1.0	0.111	ppb	9/4/19 09:33	MC
Nickel by ICP_MS 200.8	1.5	1.0	0.314	ppb	9/4/19 09:33	MC
Potassium EPA 200.7	7070	1000	310	ppb	9/5/19 10:25	MC
Selenium by ICP-MS 200.8	Less than MDL	5.0	2.06	ppb	9/4/19 09:33	MC
Sodium EPA 200.7	32100	1000	254	ppb	9/5/19 10:25	MC
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Sample ID: BA07118

September 17, 2019

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)		1 In the second	Completed Analysis Date & Time	Chemist
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 09:33	MĊ

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: Michell Cal



Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9911

September 17, 2019

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: BA07119

Wateree Well AP1-08 TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocation

8, 2019 14:50 9, 2019 14:40 Location Code: WAAP108TM

AP1-01	Login Record File: 190829006					
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)		Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 09:40	МС
Arsenic by ICP_MS 200.8	2.9	1.0	0.292	ppb	9/4/19 09:40	MC
Barium by ICP-OES 200.7	224	10.0	1.113	ppb	9/5/19 10:25	МС
Beryllium EPA 200.7	0.73 (J)	2.0	0.148	ppb	9/5/19 10:25	MC
Boron - EPA 200.7	200	200	38.458	ppb	9/5/19 10:25	MC
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 09:40	МС
Calcium EPA 200.7	17300	500	83.8	ppb	9/5/19 10:25	МС
Chromium by ICP_MS 200.8	1.3	1.0	0.345	ppb	9/4/19 09:40	МС
Cobalt by ICP_MS 200.8	1.70 (J)	2.0	0.144	ppb	9/6/19 15:13	MC
Lead by ICP-MS 200.8	0.34 (J)	1.0	0.085	ppb	9/4/19 09:40	MC
Lithium (CWA) 200.7	2.4	2.0	0.758	ppb	9/17/19 14:59	MC
Magnesium EPA 200.7	19500	50	18.7	ppb	9/5/19 10:25	MC
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/10/19 16:00	PRC
Molybdenum - EPA 200.8	0.19 (J)	1.0	0.111	ppb	9/4/19 09:40	MC
Nickel by ICP_MS 200.8	2.8	1.0	0.314	ppb	9/4/19 09:40	MC
Potassium EPA 200.7	3530	1000	310	ppb	9/5/19 10:25	MC
Selenium by ICP-MS 200.8	8.6	5.0	2.06	ppb	9/4/19 09:40	MC
Sodium EPA 200.7	18300	1000	254	ppb	9/5/19 10:25	MC
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Labworks "J value" Report



Sample ID: BA07119

September 17, 2019

CERTIFIED BY SCDHEC (LAB ID 32006):	Result		Detection Limit(MDL)	STATE FORTER AND	Completed Analysis Date & Time	Chemist
Thallium by ICP-MS 200.8	Less than MDL	0.5	0.071	ppb	9/4/19 09:40	MC

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: Minhell Con



Rocky Archer

Central Laboratory (P-08) 2102 North Lake Drive Columbia, SC 29212 Tel: (803)217-9384

Fax: (803) 217-9304

September 17, 2019

REPORT TO:

Sample ID: BA07120

Wateree Well AP1-09D TM (NPDES/CCR)

Date & Time Sampled:August 28, 2019Date & Time Submitted:August 29, 2019Collected by: A.HILLLocation

8, 2019 14:54 9, 2019 14:40 Location Code: WAAP109DTM

AP1-09D	Login Record File: 190829006						
CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analy Date & Time	sis Chemist	
Antimony by ICP-MS 200.8	Less than MDL	1.0	0.090	ppb	9/4/19 09:40	MC	
Arsenic by ICP_MS 200.8	38.3	1.0	0.292	ppb	9/4/19 09:40	MC	
Barium by ICP-OES 200.7	38.6	10.0	1.113	ppb	9/5/19 10:25	МС	
Beryllium EPA 200.7	Less than MDL	2.0	0.148	ppb	9/5/19 10:25	МС	
Boron - EPA 200.7	931	200	38.458	ppb	9/5/19 10:25	MC	
Cadmium by ICP_MS EPA 200.8	Less than MDL	1.0	0.035	ppb	9/4/19 09:40	MC	
Calcium EPA 200.7	27800	500	83.8	ppb	9/5/19 10:25	MC	
Chromium by ICP_MS 200.8	Less than MDL	1.0	0.345	ppb	9/4/19 09:40	MC	
Cobalt by ICP_MS 200.8	17.4	1.0	0.072	ppb	9/6/19 15:13	MC	
Lead by ICP-MS 200.8	0.10 (J)	1.0	0.085	ppb	9/4/19 09:40	MC	
Lithium (CWA) 200.7	6.1	2.0	0.758	ppb	9/17/19 14:59	MC	
Magnesium EPA 200.7	5840	50	18.7	ppb	9/5/19 10:25	MC	
Mercury (CWA) by EPA 245.2	Less than MDL	0.2	0.071	ppb	9/10/19 16:00	PRC	
Molybdenum - EPA 200.8	0.48 (J)	1.0	0.111	ppb	9/4/19 09:40	MC	
Nickel by ICP_MS 200.8	16.7	1.0	0.314	ppb	9/4/19 09:40	MC	
Potassium EPA 200.7	7470	1000	310	ppb	9/5/19 10:25	MC	
Selenium by ICP-MS 200.8	5.7	5.0	2.06	ppb	9/4/19 09:40	MC	
Sodium EPA 200.7	26200	1000	254	ppb	9/5/19 10:25	MC	
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Labworks "J value" Report



Sample ID: BA07120

September 17, 2019

CERTIFIED BY SCDHEC (LAB ID 32006):	RACIUT	 A second s	Detection Limit(MDL)		Completed Analysis Date & Time	Chemist
Thallium by ICP-MS 200.8	0.51	0.5	0.071	ppb	9/4/19 09:40	MC

A result marked by "J" is an estimated result that is less than the Reporting Limit and greater than or equal to the Detection Limit. The "J" value is not to be used for regulatory or compliance reporting.

If there are any questions concerning this sample, please contact the lab at (803) 217-9384.

Approved By: Minhulls Cuh



APPENDIX B

Graphs of Total Arsenic and Lithium Concentrations in Groundwater vs. Time

