



2017 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

EPA CCR RULE COMPLIANCE

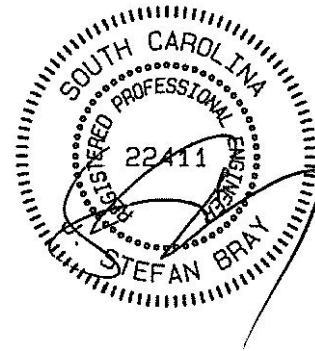
SOUTH CAROLINA ELECTRIC & GAS: Wateree Station: Ash Pond

January 2018

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1.0 INTRODUCTION

This document presents the *2017 Annual Groundwater Monitoring and Corrective Action* report for the Ash Pond at South Carolina Electric & Gas (SCE&G) Wateree Generating Station in Wateree, Richland County, South Carolina in accordance with 40 CFR Part 257.90 (e). 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).

This report presents the following information as required under 40 CFR Part 257.90 (e):

1. A facility map (aerial image) showing the Ash Pond and all background (or upgradient) and downgradient monitoring wells, including the well identification numbers, that are part of the groundwater monitoring program for the Ash Pond;
2. Identification of additional monitoring wells that were installed during 2017, along with a narrative description of why the wells were installed;
3. In addition to all the monitoring data obtained under §§ 257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;
4. A narrative discussion of transitions between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and
5. Other information required to be included in the annual report as specified in Parts 257.90 through 257.98 of the CCR Rule.

The following sections present the components of the annual report.



2.0 GROUNDWATER MONITORING WELL SYSTEM

Five Type II groundwater monitoring wells (designated MW-AP-01 through MW-AP-05) were installed and developed at Wateree Station Ash Pond in March 2016 to serve as EPA CCR Rule Compliance monitoring wells. Rising head permeability (slug) tests were conducted at the new monitoring wells, as well as at existing monitoring wells MW-AP-01A and MW-AP-08, in May 2016. 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**. A South Carolina licensed well driller with Terracon, Inc. of Columbia, South Carolina (SC License #2116) performed the drilling and monitoring well installations. A South Carolina registered surveyor from the GEL Group, Inc. of Charleston, South Carolina (ELS SC license #15513) surveyed the monitoring wells for horizontal position, ground surface elevation and top of PVC pipe elevation.

The five Type II groundwater monitoring wells were installed to monitor groundwater quality in the vicinity of the Ash Pond in compliance with the groundwater monitoring requirements of the US EPA CCR Rule (40 CFR Part 257.93). In addition, existing monitoring wells MW-AP-01A and MW-AP-08, which are also used for NPDES and South Carolina Department of Health and Environmental Control (SCDHEC) landfill groundwater monitoring compliance, are included as part of the monitoring well network for groundwater monitoring, as is monitoring well MW-FGD-01. Monitoring wells MW-AP-01A and MW-FGD-01 serve as up-gradient wells to monitor the quality of background groundwater in the surficial aquifer entering the area of the Ash Pond. The remaining monitoring wells (MW-AP-01 through MW-AP-05, and MW-AP-08) serve as down gradient wells to monitor the quality of groundwater down gradient of the Ash Pond.

3.0 GROUNDWATER MONITORING

3.1 Groundwater Sampling

In accordance with 40 CFR Part 257.94 (b), eight independent groundwater samples were collected for field and laboratory analysis from monitoring wells MW-AP-01A, MW-FGD-01, MW-AP-01 through MW-AP-05, and MW-AP-08 beginning in May 2016 and ending in July 2017. Groundwater samples were collected from the monitoring wells every other month throughout the monitoring period in accordance with the stipulations of the *Groundwater Sampling and Analysis Plan* for the Ash Pond (May 2016; revised July 2016 and October 2016). One groundwater sample was collected for analysis during each of the independent monitoring events. All independent groundwater samples collected from the monitoring wells in accordance with 40 CFR Part 257.84 (b) during the period of May 2016 through July 2017 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).

In accordance with 40 CFR Part 257.94, the first round of Detection Monitoring was conducted in September 2017 and included groundwater sampling from monitoring wells MW-AP-01A, MW-FGD-01, MW-AP-01 through MW-AP-05, and MW-AP-08. One groundwater sample was collected from each of the monitoring wells during the Detection Monitoring event. All groundwater samples collected from the monitoring wells for Detection Monitoring in September 2017 were analyzed by South Carolina Certified laboratories (SCE&G Central Laboratory and GEL Laboratories, LLC) for the constituents listed in Appendix III of the EPA CCR Rule (40 CFR Parts 257.50 through 257.107).

3.2 Results of Field and Laboratory Analyses of Groundwater Samples

The results of the field and laboratory analyses of the groundwater samples collected from the monitoring wells during the eight independent rounds of monitoring and the first round of Detection Monitoring are presented in **Appendix A**. The results indicate that the pH of the groundwater at background monitoring wells MW-AP-01A and MW-FGD-01, as well as at compliance monitoring wells MW-AP-05 and MW-AP-08 consistently falls below the EPA CCR Rule standard range of 6.5 to 8.5 standard units (generally within the range of 4.7 to 6.1 standard units). The pH of the groundwater at monitoring wells MW-AP-01 through MW-AP-04 mostly falls within the EPA CCR Rule standard



range, but can vary to below the lower end of the range. The results further indicate that the reported concentrations of chloride, fluoride, sulfate and total dissolved solids (TDS) for the groundwater samples collected from the monitoring wells during the September 2017 Detection Monitoring event were all below the corresponding maximum contaminant levels (MCLs).

Statistical analysis to compare the groundwater quality in the downgradient monitoring wells to that of background water quality for the September 2017 Detection Monitoring event was completed on January 15, 2018 by O'Brien & Gere for South Carolina Electric & Gas. The results of the statistical analysis are presented in **Appendix B**. The statistical analysis indicates that the concentrations of boron, chloride, fluoride, sulfate and TDS in the groundwater samples collected from compliance monitoring wells MW-AP-01, MW-AP-02 and MW-AP-03, the concentrations of boron, chloride, fluoride and TDS in the groundwater sample collected from compliance monitoring well MW-AP-04, and the concentrations of chloride, fluoride, sulfate and TDS in the groundwater samples collected from compliance monitoring wells MW-AP-05 and MW-AP-08 show statistically significant increases over background concentrations (as determined from the data for groundwater samples collected from background monitoring wells MW-AP-01A and MW-FGD-01). No other statistically significant increases over background concentrations were observed for the CCR Rule Appendix III constituents in the groundwater samples collected from the monitoring wells during the September 2017 Detection Monitoring event.

3.3 Assessment Monitoring

The results of the September 2017 Detection Monitoring event indicate statistically significant increases in the concentrations of multiple EPA CCR Rule Appendix III constituents relative to background concentrations in groundwater at all down gradient compliance monitoring wells. Consequently, in accordance with 40 CFR Part 257.95, SCE&G intends to conduct Assessment Monitoring at all EPA CCR Rule monitoring wells associated with the Ash Pond prior to April 15, 2018. The Assessment Monitoring will include analysis of groundwater samples for all EPA CCR Rule Appendix III and Appendix IV constituents.



4.0 KEY PROJECT ACTIVITIES FOR 2018

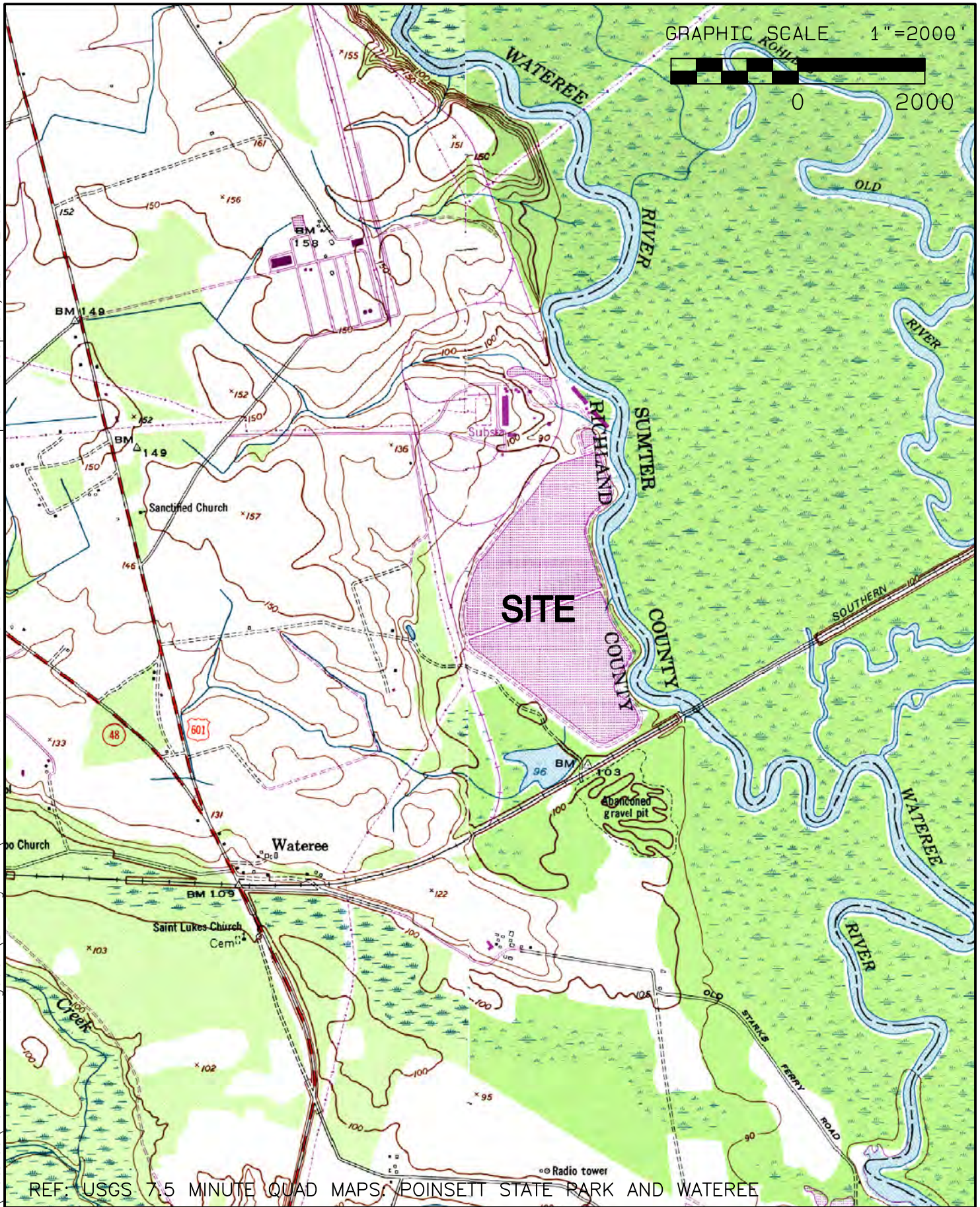
The initial Assessment Monitoring event will be completed by April 15, 2018. In accordance with 40 CFR Part 257.95 (d) (1), within 90 days following receipt of the initial Assessment Monitoring, a subsequent groundwater sampling event will occur at all of the EPA CCR Rule monitoring wells associated with the Ash Pond and analyzed for all constituents in Appendix III of the Rule, as well as all constituents in Appendix IV of the Rule that are detected in the initial Assessment Monitoring event. In addition, groundwater protection standards will be established in accordance with 40 CFR Part 257.95 (h) for all Appendix IV constituents detected during the two assessment monitoring events referenced above. Any further actions taken will depend on whether the concentrations of Appendix IV constituents detected during the two Assessment Monitoring events exceed the established groundwater protection standards and will follow the stipulations provided in 40 CFR Part 257.95 (e), (f) and (g).

V:\SCE&G\Wateree\Ash Pond Investigation\Drilling RFP\Wateree Ash Pond INVESTIGATION Plan-WORK PLAN.pro Thu Sep 30, 2010 2:03:20PM

GRAPHIC SCALE 1"=2000'



0 2000



REF. USGS 7.5 MINUTE QUAD MAPS, POINSETT STATE PARK AND WATREEE

GARRETT & MOORE
Engineering for the Power and Waste Industries

SCE&G
WATREEE STATION
SITE LOCATION MAP

JOB

FIG

1



**EPA CCR Rule Compliance
Groundwater Monitoring Wells**

Class Three Landfill

- Existing well used for background and down gradient water quality monitoring
- Well used for down gradient water quality monitoring
- Additional background monitoring well

FGD Wastewater Pond

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

Ash Pond 1

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

V:\Brain\Boutin\Waterree\waterree.pro Wed Sep 9, 2015 3:00:28PM

ORTHOPHOTO DATED MARCH 2015



APPENDIX A

Results of Field and Laboratory Analyses of Groundwater Samples

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 05/11/2016

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		4.740	3.440
Field Sp. Conductivity micromhos/cm		51.000	33.000
Field Turbidity NTU		0.70	5.50
ORP mV		198.500	227.300
Oxygen, dissolved mg/L		3.400	4.470
Temp (Celcius) degrees C		20.890	21.350
Water level elevation ft		115.56	117.30

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 05/11/2016

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER NAME	NUMBER Lab. Certificate No.	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04	MW-AP-05	MW-AP-08
		32006	32006	32006	32006	32006	32006
Field pH S.U.		6.170	5.950	6.260	6.050	6.060	6.020
Field Sp. Conductivity micromhos/cm		655.000	638.000	603.000	770.000	510.000	537.000
Field Turbidity NTU		1.10	9.10	4.10	8.10	3.10	50.00
ORP mV		-85.100	-55.500	-95.000	-60.500	-27.400	-10.200
Oxygen, dissolved mg/L		0.360	0.170	0.220	0.170	0.290	0.140
Temp (Celcius) degrees C		20.840	22.200	22.640	22.170	23.750	22.310
Water level elevation ft		89.46	87.65	88.78	88.65	84.98	85.28

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 397457 GEL Work Order: 397457

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.



Reviewed by _____

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: MW-1A Project: SCEG01716C
Sample ID: 397457001 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 11-MAY-16 14:25
Receive Date: 14-MAY-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
SW846 9056A Anions "As Received"											
Fluoride	U	ND	0.033	0.100	mg/L	1	MAR1	05/16/16	2239	1567543	1
Metals Analysis-ICP-MS											
SW846 3005A/6020A Liquid "As Received"											
Lithium	U	ND	2.00	10.0	ug/L	1	BCD1	05/19/16	1442	1567595	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	1.96	3.00	pCi/L		AXM6	05/24/16	1458	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		1.15	0.532	1.00	pCi/L		LXP1	05/23/16	0810	1568375	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JP1	05/16/16	1725	1567594

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	SW846 3005A/6020A	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.5	(15%-125%)

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: MW-8
Sample ID: 397457002
Matrix: Ground Water
Collect Date: 11-MAY-16 14:20
Receive Date: 14-MAY-16
Collector: Client
Project: SCEG01716C
Client ID: GEEL003

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
SW846 9056A Anions "As Received"											
Fluoride		0.475	0.033	0.100	mg/L	1	MAR1	05/16/16	2311	1567543	1
Metals Analysis-ICP-MS											
SW846 3005A/6020A Liquid "As Received"											
Lithium		13.8	2.00	10.0	ug/L	1	BCD1	05/19/16	1510	1567595	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	3.18	3.00	pCi/L		AXM6	05/24/16	1458	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		0.765	0.551	1.00	pCi/L		LXP1	05/23/16	0810	1568375	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JP1	05/16/16	1725	1567594

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	SW846 3005A/6020A	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			54	(15%-125%)

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: API-05 Project: SCEG01716C
Sample ID: 397457003 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 11-MAY-16 15:52
Receive Date: 14-MAY-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
EPA300.0 Fluoride in Liquid "As Received"											
Fluoride	J	0.0924	0.033	0.100	mg/L	1	MAR1	05/16/16	2343	1567543	1
Metals Analysis-ICP-MS											
200.8/200.2 NPDES Metals "As Received"											
Lithium	U	ND	2.00	10.0	ug/L	1	BCD1	05/19/16	1702	1567593	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	1.42	3.00	pCi/L		AXM6	05/24/16	1458	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		6.17	0.744	1.00	pCi/L		LXP1	05/25/16	1030	1567603	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	05/16/16	1800	1567592

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.3	(15%-125%)

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: API-01 Project: SCEG01716C
Sample ID: 397457011 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 11-MAY-16 10:37
Receive Date: 14-MAY-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
EPA300.0 Fluoride in Liquid "As Received"											
Fluoride		0.329	0.033	0.100	mg/L	1	MAR1	05/17/16	0957	1567544	1
Metals Analysis-ICP-MS											
200.8/200.2 NPDES Metals "As Received"											
Lithium	U	ND	2.00	10.0	ug/L	1	BCD1	05/19/16	1740	1567593	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	1.66	3.00	pCi/L		AXM6	05/24/16	1500	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		1.76	0.812	1.00	pCi/L		LXP1	05/22/16	1020	1567603	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	05/16/16	1800	1567592

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			74.3	(15%-125%)

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: API-02 Project: SCEG01716C
Sample ID: 397457012 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 11-MAY-16 12:34
Receive Date: 14-MAY-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
EPA300.0 Fluoride in Liquid "As Received"											
Fluoride		0.293	0.033	0.100	mg/L	1	MAR1	05/17/16	1132	1567544	1
Metals Analysis-ICP-MS											
200.8/200.2 NPDES Metals "As Received"											
Lithium		16.5	2.00	10.0	ug/L	1	BCD1	05/19/16	1744	1567593	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	1.52	3.00	pCi/L		AXM6	05/24/16	1500	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		1.83	0.757	1.00	pCi/L		LXP1	05/22/16	1020	1567603	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	05/16/16	1800	1567592

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			67.9	(15%-125%)

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: API-99 Project: SCEG01716C
Sample ID: 397457013 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 11-MAY-16 12:00
Receive Date: 14-MAY-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
EPA300.0 Fluoride in Liquid "As Received"											
Fluoride		0.342	0.033	0.100	mg/L	1	MAR1	05/17/16	1204	1567544	1
Metals Analysis-ICP-MS											
200.8/200.2 NPDES Metals "As Received"											
Lithium	U	ND	2.00	10.0	ug/L	1	BCD1	05/19/16	1747	1567593	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	1.51	3.00	pCi/L		AXM6	05/24/16	1500	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		1.44	0.777	1.00	pCi/L		LXP1	05/22/16	1020	1567603	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	05/16/16	1800	1567592

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.4	(15%-125%)

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: API-03 Project: SCEG01716C
Sample ID: 397457014 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 11-MAY-16 13:50
Receive Date: 14-MAY-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
EPA300.0 Fluoride in Liquid "As Received"											
Fluoride		0.745	0.033	0.100	mg/L	1	MAR1	05/17/16	1236	1567544	1
Metals Analysis-ICP-MS											
200.8/200.2 NPDES Metals "As Received"											
Lithium		91.5	2.00	10.0	ug/L	1	BCD1	05/19/16	1751	1567593	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	1.73	3.00	pCi/L		AXM6	05/24/16	1500	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		2.00	0.514	1.00	pCi/L		LXP1	05/22/16	1020	1567603	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	05/16/16	1800	1567592

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.6	(15%-125%)

Notes:

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: API-04 Project: SCEG01716C
Sample ID: 397457015 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 11-MAY-16 15:17
Receive Date: 14-MAY-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
EPA300.0 Fluoride in Liquid "As Received"											
Fluoride		0.262	0.033	0.100	mg/L	1	MAR1	05/17/16	1308	1567544	1
Metals Analysis-ICP-MS											
200.8/200.2 NPDES Metals "As Received"											
Lithium	U	ND	2.00	10.0	ug/L	1	BCD1	05/19/16	1754	1567593	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228		3.14	1.62	3.00	pCi/L		AXM6	05/24/16	1500	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		1.22	0.761	1.00	pCi/L		LXP1	05/22/16	1020	1567603	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	05/16/16	1800	1567592

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.4	(15%-125%)

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: May 27, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: FGD-01
Sample ID: 397457016
Matrix: Ground Water
Collect Date: 11-MAY-16 16:52
Receive Date: 14-MAY-16
Collector: Client
Project: SCEG01716C
Client ID: GEEL003

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography											
EPA300.0 Fluoride in Liquid "As Received"											
Fluoride	U	ND	0.033	0.100	mg/L	1	MAR1	05/17/16	1340	1567544	1
Metals Analysis-ICP-MS											
200.8/200.2 NPDES Metals "As Received"											
Lithium	U	ND	2.00	10.0	ug/L	1	BCD1	05/19/16	1808	1567593	2
Rad Gas Flow Proportional Counting											
GFPC, Ra228, Liquid "As Received"											
Radium-228	U	ND	1.99	3.00	pCi/L		AXM6	05/24/16	1501	1567555	3
Rad Radium-226											
Lucas Cell, Ra226, liquid "As Received"											
Radium-226		2.32	0.719	1.00	pCi/L		LXP1	05/22/16	1050	1567603	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	05/16/16	1800	1567592

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.2	(15%-125%)

Notes:

GEL LABORATORIES LLC

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QC Summary

Report Date: May 27, 2016

Page 1 of 4

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 397457

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1567543										
QC1203549409	397457010	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		MAR1	05/17/16	05:02
QC1203549408	LCS										
Fluoride	2.50				2.35	mg/L	93.9	(90%-110%)		05/16/16	22:07
QC1203549407	MB										
Fluoride			U		ND	mg/L				05/16/16	21:35
QC1203549410	397457010	PS									
Fluoride	2.50	U	ND		2.44	mg/L	96.3	(90%-110%)		05/17/16	05:34
Batch	1567544										
QC1203549413	397457011	DUP									
Fluoride			0.329		0.336	mg/L	2.1 ^	(+/-0.100)	MAR1	05/17/16	10:29
QC1203549412	LCS										
Fluoride	2.50				2.38	mg/L	95.3	(90%-110%)		05/17/16	09:25
QC1203549411	MB										
Fluoride			U		ND	mg/L				05/17/16	08:53
QC1203549414	397457011	PS									
Fluoride	2.50		0.329		2.70	mg/L	94.6	(90%-110%)		05/17/16	11:01
Metals Analysis - ICPMS											
Batch	1567593										
QC1203549549	397457003	DUP									
Lithium		U	ND	U	ND	ug/L	N/A		BCD1	05/19/16	17:05
QC1203549550	397457016	DUP									
Lithium		U	ND	U	ND	ug/L	N/A			05/19/16	18:12
QC1203549548	LCS										
Lithium	50.0				50.0	ug/L	100	(80%-120%)		05/19/16	16:58
QC1203549547	MB										
Lithium			U		ND	ug/L				05/19/16	16:55
QC1203549551	397457003	MS									
Lithium	50.0	U	ND		46.9	ug/L	92.5	(75%-125%)		05/19/16	17:09
QC1203549552	397457016	MS									
					50.2			(75%-125%)			

GEL LABORATORIES LLC

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QC Summary

Workorder: 397457

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Ra-226											
Batch	1567603										
Radium-226	122	2.32		131	pCi/L		105	(75%-125%)		05/22/16	10:50
Batch	1568375										
QC1203551527	397689003 DUP										
Radium-226		1.02		1.04	pCi/L	1.86		(0% - 100%)	LXP1	05/23/16	09:10
QC1203551529	LCS										
Radium-226	24.4			26.1	pCi/L		107	(75%-125%)		05/23/16	09:10
QC1203551526	MB										
Radium-226			U	0.190	pCi/L					05/23/16	09:10
QC1203551528	397689003 MS										
Radium-226	122	1.02		110	pCi/L		89	(75%-125%)		05/23/16	09:10

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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

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QC Summary

Workorder: 397457

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q											
Q											
R											
R											
U											
UI											
UJ											
UL											
X											
Y											
Z											
^											
d											
e											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22353**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: May 11, 2016 11:25
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAG01TDS

MW 1

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.64	0.50	mg/L	5/16/16 04:12	LS
pH by SM4500HB	4.82	0.00	S.U.	5/13/16 09:20	CDB
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	32	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22354**

Wateree NPDES Well MW 8 (NPDES)

Date & Time Sampled: May 11, 2016 14:20
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.1	0.50	mg/L	5/16/16 04:12	LS
pH by SM4500HB	5.95	0.00	S.U.	5/13/16 09:20	CDB
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	118	1.0	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	382	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22355**

Wateree Well AP1-05 (NPDES)

Date & Time Sampled: May 11, 2016 15:50
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.9	0.50	mg/L	5/16/16 04:12	LS
pH by SM4500HB	6.03	0.00	S.U.	5/13/16 09:20	CDB
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	23.3	0.50	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	325	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22360**

Wateree Well AP1-01 (NPDES)

Date & Time Sampled: May 11, 2016 10:37
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP101TDS

AP1-01

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	110	1.0	mg/L	5/16/16 04:12	LS
pH by SM4500HB	6.37	0.00	S.U.	5/13/16 09:20	CDB
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	1.05	0.50	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	329	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22361**

Wateree Well AP1-02 (NPDES)

Date & Time Sampled: May 11, 2016 12:34
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP102TDS

AP1-02

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	43.6	0.50	mg/L	5/16/16 04:12	LS
pH by SM4500HB Holding Time of 15 minutes has been exceeded.	6.38	0.00	S.U.	5/13/16 09:20	CDB
Sulfates by IC EPA 300.0	47.1	0.50	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	361	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22363**

Wateree Well AP1-03 (NPDES)

Date & Time Sampled: May 11, 2016 13:50
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP103TDS

AP1-03

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	19.5	0.50	mg/L	5/16/16 04:12	LS
pH by SM4500HB	6.63	0.00	S.U.	5/13/16 09:20	CDB
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	66.9	0.50	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	353	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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 Tel: (803)217-9384
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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22364**

Wateree Well AP1-04 (NPDES)

Date & Time Sampled: May 11, 2016 15:17
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP104TDS

AP1-04

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	16.8	0.50	mg/L	5/16/16 04:12	LS
pH by SM4500HB	6.61	0.00	S.U.	5/13/16 09:20	CDB
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	1.17	0.50	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	408	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22365**

Wateree Well FGD-01 (NPDES)

Date & Time Sampled: May 11, 2016 16:52
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAFGD01TDS

FGD-01

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	3.54	0.50	mg/L	5/16/16 04:12	LS
pH by SM4500HB	5.35	0.00	S.U.	5/13/16 09:20	CDB
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	5/16/16 04:12	LS
Total Dissolved Solid-SM2540C	32	2.0	mg/L	5/13/16 11:45	CDB

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

Approved By: _____



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 Tel: (803)217-9384
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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22373**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: May 11, 2016 11:25
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAG01TM

MW 1

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Barium (CWA) 200.7	55.8	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	Less than	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	Less than	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Calcium EPA 200.7	781	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Lead by ICP-MS EPA 200.8	1.2	1.0	ppb	5/16/16 15:25	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	Less than	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/16/16 15:25	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22374**

Wateree NPDES Well MW 8 Total Metals (NPDES)

Date & Time Sampled: May 11, 2016 14:20
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Arsenic by ICP_MS EPA 200.8	4.5	1.0	ppb	5/16/16 15:25	MC
Barium (CWA) 200.7	152	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	3.0	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	Less than	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Calcium EPA 200.7	21700	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	1.2	1.0	ppb	5/16/16 15:25	MC
Cobalt by ICP_MS EPA 200.8	19.5	1.0	ppb	5/16/16 15:25	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	Less than	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/16/16 15:25	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22375**

Wateree Well AP1-05 T Metals (NPDES)

Date & Time Sampled: May 11, 2016 15:50
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Arsenic by ICP_MS EPA 200.8	1.6	1.0	ppb	5/16/16 15:25	MC
Barium (CWA) 200.7	224	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	Less than	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	Less than	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Calcium EPA 200.7	13100	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	1.0	1.0	ppb	5/16/16 15:25	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	Less than	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/16/16 15:25	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22380**

Wateree Well AP1-01 T Metals (NPDES)

Date & Time Sampled: May 11, 2016 10:37
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP101TM

AP1-01

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Barium (CWA) 200.7	178	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	Less than	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	Less than	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Calcium EPA 200.7	38900	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	Less than	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/16/16 15:25	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/16/16 15:25	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22381**

Wateree Well AP1-02 T Metals (NPDES)

Date & Time Sampled: May 11, 2016 12:34
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP102TM

AP1-02

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Arsenic by ICP_MS EPA 200.8	119	1.0	ppb	5/17/16 10:59	MC
Barium (CWA) 200.7	191	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	Less than	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	Less than	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Calcium EPA 200.7	59100	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Cobalt by ICP_MS EPA 200.8	1.3	1.0	ppb	5/17/16 10:59	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	35.1	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/17/16 10:59	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22383**

Wateree Well AP1-03 T Metals (NPDES)

Date & Time Sampled: May 11, 2016 13:50
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP103TM

AP1-03

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Arsenic by ICP_MS EPA 200.8	1390	50.0	ppb	5/17/16 10:59	MC
Barium (CWA) 200.7	133	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	Less than	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	1020	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Calcium EPA 200.7	73900	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	28.1	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/17/16 10:59	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22384**

Wateree Well AP1-04 T Metals (NPDES)

Date & Time Sampled: May 11, 2016 15:17
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAAP104TM

AP1-04

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Arsenic by ICP_MS EPA 200.8	11.4	1.0	ppb	5/17/16 10:59	MC
Barium (CWA) 200.7	166	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	Less than	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	2180	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Calcium EPA 200.7	98400	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	Less than	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/17/16 10:59	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22385**

Wateree Well FGD-01 T Metals (NPDES)

Date & Time Sampled: May 11, 2016 16:52
 Date & Time Submitted: May 12, 2016 15:00
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 160513003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Barium (CWA) 200.7	35.3	10.0	ppb	5/19/16 08:03	MC
Beryllium EPA 200.7	Less than	1.0	ppb	5/19/16 08:03	MC
Boron - EPA 200.7	Less than	1000	ppb	5/19/16 08:03	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Calcium EPA 200.7	359	100	ppb	5/19/16 08:03	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Cobalt by ICP_MS EPA 200.8	1.3	1.0	ppb	5/17/16 10:59	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/18/16 14:10	MC
Molybdenum - EPA 200.7	Less than	5.0	ppb	5/19/16 08:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	5/17/16 10:59	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	5/17/16 10:59	MC

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 07/11/2016

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		4.630	4.690
Field Sp. Conductivity micromhos/cm		55.000	49.000
Field Turbidity NTU		0.94	0.71
ORP mV		167.200	152.100
Oxygen, dissolved mg/L		5.570	4.080
Temp (Celcius) degrees C		24.410	25.360
Water level elevation ft		114.06	115.87

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 07/11/2016

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER NAME	NUMBER Lab. Certificate No.	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04	MW-AP-05	MW-AP-08
		32006	32006	32006	32006	32006	32006
Field pH S.U.		6.620	6.420	6.580	6.340	5.740	5.680
Field Sp. Conductivity micromhos/cm		5.830	607.000	411.800	701.000	424.000	467.700
Field Turbidity NTU		5.30	8.60	6.90	0.95	9.87	20.60
ORP mV		-123.700	-83.700	-96.600	-50.000	-19.300	-1.100
Oxygen, dissolved mg/L		0.400	0.390	0.290	0.400	0.510	0.320
Temp (Celcius) degrees C		22.000	25.800	24.000	23.680	23.880	23.000
Water level elevation ft		87.68	85.07	86.90	85.66	82.42	82.61

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 401760 GEL Work Order: 401760

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.

Reviewed by _____



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-1A	Project: SCEG01716c
Sample ID: 401760001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 11:00	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	07/22/16	2322	1582386	1
Metals Analysis-ICP-MS												
SW846 3005A/6020A Liquid "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1931	1582806	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.44	3.00	pCi/L			AXM6	07/27/16	1333	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.915	0.322	1.00	pCi/L			LXP1	07/28/16	0830	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JP1	07/18/16	1855	1582805

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SW846 3005A/6020A	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.1	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-01	Project: SCEG01716c
Sample ID: 401760002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 11:20	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.337	0.033	0.100	mg/L		1	MAR1	07/23/16	0052	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1335	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.88	3.00	pCi/L			AXM6	07/27/16	1203	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.921	0.425	1.00	pCi/L			LXP1	07/28/16	0830	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-99	Project: SCEG01716c
Sample ID: 401760003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 11:30	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.336	0.033	0.100	mg/L		1	MAR1	07/23/16	0122	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1336	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.87	3.00	pCi/L			AXM6	07/27/16	1203	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.752	0.392	1.00	pCi/L			LXP1	07/28/16	0830	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			64.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-02	Project: SCEG01716c
Sample ID: 401760004	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 13:00	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.320	0.033	0.100	mg/L		1	MAR1	07/23/16	0152	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		17.7	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1338	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		3.32	2.12	3.00	pCi/L			AXM6	07/27/16	1203	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.05	0.352	1.00	pCi/L			LXP1	07/28/16	0830	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			49	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-05	Project: SCEG01716c
Sample ID: 401760005	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 13:20	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0812	0.033	0.100	mg/L		1	MAR1	07/23/16	0222	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1339	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.83	3.00	pCi/L			AXM6	07/27/16	1204	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.41	0.333	1.00	pCi/L			LXP1	07/28/16	0900	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			67.6	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-03	Project: SCEG01716c
Sample ID: 401760006	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 14:35	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.904	0.033	0.100	mg/L		1	MAR1	07/23/16	0252	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		81.3	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1343	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.03	3.00	pCi/L			AXM6	07/27/16	1208	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.359	1.00	pCi/L			LXP1	07/28/16	0900	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			69.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-04	Project: SCEG01716c
Sample ID: 401760007	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 15:00	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.365	0.033	0.100	mg/L		1	MAR1	07/23/16	0422	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1345	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.05	3.00	pCi/L			AXM6	07/27/16	1203	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.00	0.385	1.00	pCi/L			LXP1	07/28/16	0900	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			59.4	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FB-01	Project: SCEG01716c
Sample ID: 401760008	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 16:15	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	07/23/16	0451	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1346	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.58	3.00	pCi/L			AXM6	07/27/16	1441	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.493	0.419	1.00	pCi/L			LXP1	07/28/16	0900	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			72.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FGD-01	Project: SCEG01716c
Sample ID: 401760009	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 16:35	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	07/23/16	0521	1582386	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	2.23	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1348	1582350	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.55	3.00	pCi/L			AXM6	07/27/16	1204	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.20	0.341	1.00	pCi/L			LXP1	07/28/16	0900	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	07/15/16	1815	1582349

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.1	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 29, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-8	Project: SCEG01716c
Sample ID: 401760010	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 11-JUL-16 16:45	
Receive Date: 15-JUL-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.418	0.033	0.100	mg/L		1	MAR1	07/23/16	0551	1582386	1
Metals Analysis-ICP-MS												
SW846 3005A/6020A Liquid "As Received"												
Lithium		12.1	2.00	10.0	ug/L	1.00	1	SKJ	07/20/16	1943	1582806	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.25	3.00	pCi/L			AXM6	07/27/16	1204	1582431	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		2.39	0.459	1.00	pCi/L			LXP1	07/28/16	0900	1583314	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JP1	07/18/16	1855	1582805

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	SW846 3005A/6020A	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			61.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: July 29, 2016

Page 1 of 4

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 401760

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1582386										
QC1203586449	401760001	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		MAR1	07/22/16	23:52
QC1203586450	401760020	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A			07/23/16	12:20
QC1203586448	LCS										
Fluoride	2.50				2.53	mg/L		101	(90%-110%)	07/22/16	22:52
QC1203586447	MB										
Fluoride			U		ND	mg/L				07/22/16	22:23
QC1203586451	401760001	PS									
Fluoride	2.50	U	ND		2.53	mg/L		100	(90%-110%)	07/23/16	00:22
QC1203586452	401760020	PS									
Fluoride	2.50	U	ND		2.45	mg/L		96.9	(90%-110%)	07/23/16	12:50
Metals Analysis - ICPMS											
Batch	1582350										
QC1203586364	401760011	DUP									
Lithium		J	2.13	J	2.13	ug/L	0.282 ^		(+/-10.0)	SKJ	07/20/16 13:53
QC1203586362	LCS										
Lithium	50.0				51.1	ug/L		102	(80%-120%)	07/20/16	13:30
QC1203586361	MB										
Lithium			U		ND	ug/L				07/20/16	13:29
QC1203586367	401760011	MS									
Lithium	50.0	J	2.13		52.7	ug/L		101	(75%-125%)	07/20/16	13:55
QC1203586370	401760011	SDILT									
Lithium		J	2.13	U	ND	ug/L	N/A		(0%-10%)	07/20/16	13:56
Batch	1582806										
QC1203587432	401760010	DUP									
Lithium			12.1		12.1	ug/L	0.306 ^		(+/-10.0)	SKJ	07/20/16 19:47
QC1203587431	LCS										
Lithium	50.0				49.0	ug/L		98.1	(80%-120%)	07/20/16	19:27
QC1203587430	MB										
					ND						

GEL LABORATORIES LLC

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

QC Summary

Workorder: 401760

Page 2 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1582806										
Lithium			U		ug/L					07/20/16	19:23
QC1203587433	401760010	MS									
Lithium	50.0	12.1		63.3	ug/L		102	(75%-125%)	SKJ	07/20/16	19:51
QC1203587434	401760010	SDILT									
Lithium		12.1	J	2.37	ug/L	1.95		(0%-10%)		07/20/16	19:59
Batch	1582808										
QC1203587437	401760016	DUP									
Lithium		U	ND	U	ND	ug/L	N/A		SKJ	07/20/16	00:13
QC1203587436	LCS										
Lithium	50.0			47.6	ug/L		95.2	(80%-120%)		07/20/16	00:05
QC1203587435	MB										
Lithium			U	ND	ug/L					07/20/16	00:02
QC1203587438	401760016	MS									
Lithium	50.0	U	ND	49.1	ug/L		97.4	(75%-125%)		07/20/16	00:17
QC1203587439	401760016	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		07/20/16	00:21
Rad Gas Flow											
Batch	1582431										
QC1203586537	401760008	DUP									
Radium-228		U	1.69	U	0.659	pCi/L	N/A		N/AAXM6	07/27/16	14:41
QC1203586538	LCS										
Radium-228	45.0			41.5	pCi/L		92.1	(75%-125%)		07/27/16	12:07
QC1203586536	MB										
Radium-228			U	1.27	pCi/L					07/27/16	12:06
Rad Ra-226											
Batch	1583314										
QC1203588585	401758001	DUP									
Radium-226			1.21		1.53	pCi/L	23.5	(0% - 100%)	LXP1	07/28/16	09:35
QC1203588587	LCS										
Radium-226	24.4			28.0	pCi/L		115	(75%-125%)		07/28/16	09:35
QC1203588584	MB										
Radium-226			U	0.0423	pCi/L					07/28/16	09:35
QC1203588586	401758001	MS									

GEL LABORATORIES LLC

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

QC Summary

Workorder: 401760

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Ra-226											
Batch	1583314										
Radium-226	122	1.21		97.2	pCi/L		78.7	(75%-125%)		07/28/16	09:35
Batch	1583315										
QC1203588589	401760020	DUP									
Radium-226		1.12		0.989	pCi/L	12.6		(0%-20%)	LXP1	07/28/16	11:15
QC1203588591	LCS										
Radium-226	24.4			20.3	pCi/L		83.2	(75%-125%)		07/28/16	11:45
QC1203588588	MB										
Radium-226		U		0.140	pCi/L					07/28/16	10:40
QC1203588590	401760020	MS									
Radium-226	122	1.12		117	pCi/L		95.3	(75%-125%)		07/28/16	11:15

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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

GEL LABORATORIES LLC

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

QC Summary

Workorder: 401760

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q											
Q											
R											
R											
R											
U											
U											
UI											
UI											
UJ											
UJ											
UL											
UL											
X											
X											
Y											
Y											
Z											
Z											
^											
^											
d											
d											
e											
e											
h											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22909**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: July 11, 2016 11:00
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAG01TDS

MW 1

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.4	0.50	ppm	7/18/16 12:05	LS
pH by SM4500HB	5.93	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	less than	0.50	ppm	7/18/16 12:05	LS
Total Dissolved Solid-SM2540C	27	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22910**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: July 11, 2016 11:20
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP101TDS

AP1-01

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	132	2.5	ppm	7/18/16 13:57	LS
pH by SM4500HB	6.69	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	1.8	0.50	ppm	7/18/16 13:57	LS
Total Dissolved Solid-SM2540C	355.5	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22912**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: July 11, 2016 13:00
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP102TDS

AP1-02

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	41	0.50	ppm	7/18/16 12:53	LS
pH by SM4500HB	6.62	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	48	0.50	ppm	7/18/16 12:53	LS
Total Dissolved Solid-SM2540C	375	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22913**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: July 11, 2016 13:20
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	19	0.50	ppm	7/18/16 12:53	LS
pH by SM4500HB	6.19	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	4.8	0.50	ppm	7/18/16 12:53	LS
Total Dissolved Solid-SM2540C	238	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22914**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: July 11, 2016 14:35
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP103TDS

AP1-03

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18	1.0	ppm	7/18/16 16:37	LS
pH by SM4500HB	6.90	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	53	1.0	ppm	7/18/16 16:37	LS
Total Dissolved Solid-SM2540C	281	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22915**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: July 11, 2016 15:00
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP104TDS

AP1-04

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	17	0.50	ppm	7/18/16 13:42	LS
pH by SM4500HB	6.65	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	1.1	0.50	ppm	7/18/16 13:42	LS
Total Dissolved Solid-SM2540C	422	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22917**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: July 11, 2016 16:35
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAFGD01TDS

FGD-01

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	6.0	0.50	ppm	7/18/16 14:28	LS
pH by SM4500HB	6.12	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	less than	0.50	ppm	7/18/16 14:28	LS
Total Dissolved Solid-SM2540C	27	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



Central Laboratory (P-08)
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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22918**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: July 11, 2016 16:45
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 160712003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	17	2.5	ppm	7/18/16 16:52	LS
pH by SM4500HB	6.01	0.00	S.U.	7/13/16 10:28	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	109	2.5	ppm	7/18/16 16:52	LS
Total Dissolved Solid-SM2540C	385	2.0	mg/L	7/14/16 10:28	PRC

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

Approved By: _____



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 Columbia, SC 29212
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22889**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: July 11, 2016 11:00
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAG01TM

MW 1

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Barium (CWA) 200.7	56.5	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	Less than	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	Less than	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	781	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	1.4	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22890**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: July 11, 2016 11:20
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP101TM

AP1-01

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Barium (CWA) 200.7	186	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	Less than	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	1000	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	42400	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	5.4	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22892**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: July 11, 2016 13:00
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP102TM

AP1-02

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	202	1.0	ppb	8/8/16 12:15	MC
Barium (CWA) 200.7	204	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	Less than	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	Less than	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	70700	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	46.9	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____



Central Laboratory (P-08)
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 Tel: (803)217-9384
 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22893**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: July 11, 2016 13:20
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	1.4	1.0	ppb	8/8/16 12:15	MC
Barium (CWA) 200.7	192	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	Less than	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	Less than	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	12200	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____



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 Columbia, SC 29212
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22894**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: July 11, 2016 14:35
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP103TM

AP1-03

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	1120	250	ppb	8/10/16 16:05	MC
Barium (CWA) 200.7	103	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	Less than	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	1000	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	57000	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	27.3	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22895**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: July 11, 2016 15:00
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAAP104TM

AP1-04

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	7.1	1.0	ppb	8/8/16 12:15	MC
Barium (CWA) 200.7	146	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	Less than	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	2410	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	108000	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	1.0	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22897**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: July 11, 2016 16:35
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Barium (CWA) 200.7	71.4	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	Less than	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	Less than	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	753	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	1.4	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB22898**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: July 11, 2016 16:45
 Date & Time Submitted: July 12, 2016 15:25
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 160712002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	8/8/16 12:15	MC
Arsenic by ICP_MS EPA 200.8	6.3	1.0	ppb	8/8/16 12:15	MC
Barium (CWA) 200.7	171	10.0	ppb	7/18/16 10:21	MC
Beryllium EPA 200.7	5.8	1.0	ppb	7/18/16 10:21	MC
Boron - EPA 200.7	Less than	1000	ppb	7/18/16 10:21	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Calcium EPA 200.7	21900	100	ppb	7/18/16 10:21	MC
Chromium by ICP_MS EPA 200.8	2.3	1.0	ppb	8/8/16 12:15	MC
Cobalt by ICP_MS EPA 200.8	20.1	1.0	ppb	7/18/16 11:39	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/18/16 08:10	MC
Molybdenum - EPA 200.8	Less than	5.0	ppb	8/8/16 12:15	MC
Selenium by ICP-MS EPA 200.8	20.8	5.0	ppb	8/8/16 12:15	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	7/18/16 11:39	MC

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 09/19/2016

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		4.450	3.900
Field Sp. Conductivity micromhos/cm		47.000	47.000
Field Turbidity NTU		179.40	282.10
ORP mV		5.210	2.920
Oxygen, dissolved mg/L		1.000	2.140
Temp (Celcius) degrees C		25.610	20.130
Water level elevation ft		114.31	115.17

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 09/19/2016

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04	MW-AP-05	MW-AP-08
NAME	Lab. Certificate No.	32006	32006	32006	32006	32006	32006
Field pH S.U.		6.530	6.500	6.200	6.490	6.050	5.980
Field Sp. Conductivity micromhos/cm		705.000	664.000	522.000	749.000	433.000	556.000
Field Turbidity NTU		-100.50	-97.10	-68.00	-54.40	-15.20	-19.50
ORP mV		0.080	0.250	0.070	0.110	0.180	0.460
Oxygen, dissolved mg/L		0.600	7.250	7.860	1.200	9.400	20.100
Temp (Celcius) degrees C		23.000	28.790	21.850	23.450	20.770	26.830
Water level elevation ft		87.86	84.63	86.48	86.61	81.35	81.64

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 406540 GEL Work Order: 406540

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.

Reviewed by _____



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-8	Project: SCEG01716c
Sample ID: 406540001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 12:30	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
SW846 9056A Anions "As Received"												
Fluoride		0.274	0.033	0.100	mg/L		1	MXL2	09/23/16	1720	1601709	1
Metals Analysis-ICP-MS												
SW846 3005A/6020A Liquid "As Received"												
Lithium	J	3.09	3.00	10.0	ug/L	1.00	1	SKJ	09/26/16	2211	1601309	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.60	3.00	pCi/L			AXM6	10/19/16	1221	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.804	0.351	1.00	pCi/L			LXP1	10/18/16	0805	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JP1	09/22/16	1730	1601308

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	SW846 3005A/6020A	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			73.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-01	Project: SCEG01716c
Sample ID: 406540002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 12:35	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.363	0.033	0.100	mg/L		1	MXL2	09/23/16	1735	1601708	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	09/26/16	1707	1601317	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.27	3.00	pCi/L			AXM6	10/19/16	1221	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.44	0.505	1.00	pCi/L			LXP1	10/18/16	0805	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	09/22/16	1905	1601316

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-02	Project: SCEG01716c
Sample ID: 406540003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 14:35	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.372	0.033	0.100	mg/L		1	MXL2	09/23/16	1904	1601708	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		19.8	2.00	10.0	ug/L	1.00	1	SKJ	09/26/16	1723	1601317	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.68	3.00	pCi/L			AXM6	10/19/16	1221	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.16	0.492	1.00	pCi/L			LXP1	10/18/16	0845	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	09/22/16	1905	1601316

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			80.5	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-1A	Project: SCEG01716c
Sample ID: 406540004	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 14:50	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
SW846 9056A Anions "As Received"												
Fluoride	J	0.0597	0.033	0.100	mg/L		1	MXL2	09/23/16	1751	1601709	1
Metals Analysis-ICP-MS												
SW846 3005A/6020A Liquid "As Received"												
Lithium	U	ND	3.00	10.0	ug/L	1.00	1	SKJ	09/26/16	2239	1601309	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.56	3.00	pCi/L			AXM6	10/19/16	1221	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.536	0.257	1.00	pCi/L			LXP1	10/18/16	0845	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JP1	09/22/16	1730	1601308

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	SW846 3005A/6020A	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			79.6	(15%-125%)

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FB-01 EPA	Project: SCEG01716c
Sample ID: 406540005	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 15:35	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MXL2	09/23/16	1934	1601708	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	09/26/16	1734	1601317	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.85	3.00	pCi/L			AXM6	10/19/16	1221	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.379	1.00	pCi/L			LXP1	10/18/16	0845	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	09/22/16	1905	1601316

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			78.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FB-01 SW846	Project: SCEG01716c
Sample ID: 406540006	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 15:35	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
SW846 9056A Anions "As Received"												
Fluoride	J	0.0664	0.033	0.100	mg/L		1	MXL2	09/23/16	1823	1601709	1
Metals Analysis-ICP-MS												
SW846 3005A/6020A Liquid "As Received"												
Lithium	U	ND	3.00	10.0	ug/L	1.00	1	SKJ	09/26/16	2243	1601309	2

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	JP1	09/22/16	1730	1601308

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	SW846 3005A/6020A	

Notes:

Column headers are defined as follows:

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

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Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-04	Project: SCEG01716c
Sample ID: 406540007	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 16:15	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.351	0.033	0.100	mg/L		1	MXL2	09/23/16	2004	1601708	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	09/26/16	1738	1601317	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.48	3.00	pCi/L			AXM6	10/19/16	1221	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.57	0.446	1.00	pCi/L			LXP1	10/18/16	0845	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	09/22/16	1905	1601316

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			91.5	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-03	Project: SCEG01716c
Sample ID: 406540008	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 17:40	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.805	0.033	0.100	mg/L		1	MXL2	09/23/16	2034	1601708	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		82.5	2.00	10.0	ug/L	1.00	1	SKJ	09/26/16	1742	1601317	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.65	3.00	pCi/L			AXM6	10/19/16	1338	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.02	0.443	1.00	pCi/L			LXP1	10/18/16	0845	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	09/22/16	1905	1601316

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			82.1	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-05	Project: SCEG01716c
Sample ID: 406540009	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 19-SEP-16 17:40	
Receive Date: 22-SEP-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0627	0.033	0.100	mg/L		1	MXL2	09/23/16	2104	1601708	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	SKJ	09/26/16	1746	1601317	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.02	3.00	pCi/L			AXM6	10/19/16	1222	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.896	0.426	1.00	pCi/L			LXP1	10/18/16	0845	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	09/22/16	1905	1601316

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			87.7	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: October 19, 2016

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: FGD-01 Project: SCEG01716c
Sample ID: 406540010 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 19-SEP-16 18:50
Receive Date: 22-SEP-16
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MXL2	09/23/16	2234	1601708	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	2.33	2.00	10.0	ug/L	1.00	1	SKJ	09/26/16	1750	1601317	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.68	1.32	3.00	pCi/L			AXM6	10/19/16	1222	1603992	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.36	0.427	1.00	pCi/L			LXP1	10/18/16	0845	1602211	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JP1	09/22/16	1905	1601316

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.6	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: October 19, 2016

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GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 406540

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch 1601708											
QC1203634730	406540002	DUP									
Fluoride		0.363		0.371	mg/L	2.34 ^		(+/-0.100)	MXL2	09/23/16	18:05
QC1203634731	406540015	DUP									
Fluoride	U	ND	U	ND	mg/L	N/A				09/24/16	01:33
QC1203634729	LCS										
Fluoride	2.50			2.35	mg/L		94	(90%-110%)		09/23/16	17:05
QC1203634728	MB										
Fluoride			U	ND	mg/L					09/23/16	16:35
QC1203634732	406540002	PS									
Fluoride	2.50	0.363		2.72	mg/L		94.4	(90%-110%)		09/23/16	18:35
QC1203634733	406540015	PS									
Fluoride	2.50	U	ND	2.50	mg/L		99	(90%-110%)		09/24/16	02:03
Batch 1601709											
QC1203634736	406540021	DUP									
Fluoride	J	0.0591	J	0.0775	mg/L	26.9 ^		(+/-0.100)	MXL2	09/23/16	23:06
QC1203634735	LCS										
Fluoride	2.50			2.57	mg/L		103	(90%-110%)		09/23/16	16:49
QC1203634734	MB										
Fluoride			U	ND	mg/L					09/23/16	16:18
QC1203634737	406540021	PS									
Fluoride	2.50	J	0.0591	2.77	mg/L		109	(90%-110%)		09/23/16	23:37
Metals Analysis - ICPMS											
Batch 1601309											
QC1203633861	406540001	DUP									
Lithium	J	3.09	J	3.02	ug/L	2.33 ^		(+/-10.0)	SKJ	09/26/16	22:15
QC1203633860	LCS										
Lithium	50.0			51.9	ug/L		104	(80%-120%)		09/26/16	22:07
QC1203633859	MB										
Lithium			U	ND	ug/L					09/26/16	22:03
QC1203633862	406540001	MS									
				52.9				(75%-125%)			

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QC Summary

Workorder: 406540

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Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1601309										
Lithium	50.0	J	3.09		ug/L		99.6			09/26/16	22:19
QC1203633863	406540001	SDILT									
Lithium		J	3.09	U	ND	ug/L	N/A	(0%-10%)	SKJ	09/26/16	22:27
Batch	1601317										
QC1203633871	406540002	DUP									
Lithium		U	ND	U	ND	ug/L	N/A		SKJ	09/26/16	17:11
QC1203633872	406540012	DUP									
Lithium		U	ND	U	ND	ug/L	N/A			09/27/16	11:49
QC1203633870	LCS										
Lithium	50.0				48.0	ug/L	95.9	(80%-120%)		09/26/16	17:03
QC1203633869	MB										
Lithium			U		ND	ug/L				09/26/16	16:59
QC1203633873	406540002	MS									
Lithium	50.0	U	ND		48.4	ug/L	96.4	(75%-125%)		09/26/16	17:15
QC1203633874	406540012	MS									
Lithium	50.0	U	ND		51.1	ug/L	102	(75%-125%)		09/27/16	11:52
QC1203633875	406540002	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		09/26/16	17:19
QC1203633876	406540012	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		09/27/16	11:55
Rad Gas Flow											
Batch	1603992										
QC1203640324	406540008	DUP									
Radium-228		U	1.64	U	0.940	pCi/L	N/A		N/A AXM6	10/19/16	13:38
QC1203640325	LCS										
Radium-228	21.9				21.0	pCi/L	95.9	(75%-125%)		10/19/16	12:21
QC1203640323	MB										
Radium-228			U		0.252	pCi/L				10/19/16	12:21
Rad Ra-226											
Batch	1602211										
QC1203636173	406540001	DUP									
Radium-226			0.804		1.10	pCi/L	31.1	(0% - 100%)	LXP1	10/18/16	10:30
QC1203636175	LCS										

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QC Summary

Workorder: 406540

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Ra-226											
Batch	1602211										
Radium-226	24.4			26.8	pCi/L		110	(75%-125%)		10/18/16	10:30
QC1203636172	MB										
Radium-226			U	0.0609	pCi/L				LXP1	10/18/16	10:30
QC1203636174	406540001 MS										
Radium-226	122	0.804		129	pCi/L		105	(75%-125%)		10/18/16	10:30

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMF Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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 Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

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QC Summary

Workorder: 406540

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UJ											
UL											
X											
Y											
Z											
^											
d											
e											
h											

UJ Gamma Spectroscopy--Uncertain identification

UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.

X 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.

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23720**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: September 19, 2016 12:30
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.5	2.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	6.2	0.00	S.U.	9/21/16 11:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	53.7	2.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	361	2.0	mg/L	9/22/16 10:40	PRC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23721**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: September 19, 2016 12:35

Date & Time Submitted: September 20, 2016 15:40

Collected by: A.HILL Location Code: WAAP101TDS

AP1-01

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	148.5	2.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	6.7	0.00	S.U.	9/21/16 11:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	9.20	2.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	405	2.0	mg/L	9/22/16 10:40	PRC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23722**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: September 19, 2016 14:35
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP102TDS

AP1-02

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	67.2	0.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	6.6	0.00	S.U.	9/21/16 11:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	48.4	0.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	367	2.0	mg/L	9/22/16 10:40	PRC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23723**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: September 19, 2016 14:50
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAG01TDS

MW 1

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.35	0.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	5.8	0.00	S.U.	9/21/16 11:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	LESS THAN	0.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	37	2.0	mg/L	9/22/16 10:40	PRC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23725**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: September 19, 2016 16:15
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP104TDS

AP1-04

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	17.5	0.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	6.6	0.00	S.U.	9/21/16 11:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	LESS THAN	0.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	428	2.0	mg/L	9/22/16 10:40	PRC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23726**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: September 19, 2016 17:40
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP103TDS

AP1-03

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	20.5	0.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	6.7	0.00	S.U.	9/21/16 11:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	55.3	0.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	312	2.0	mg/L	9/22/16 10:40	PRC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23727**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: September 19, 2016 17:40
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	19.5	0.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	6.1	0.00	S.U.	9/21/16 11:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	3.22	0.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	252.5	2.0	mg/L	9/22/16 10:40	PRC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23728**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: September 19, 2016 18:50

Date & Time Submitted: September 20, 2016 15:40

Collected by: A.HILL Location Code: WAFGD01TDS

FGD-01

Login Record File: 160920003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	7.00	0.5	mg/L	10/4/16 03:41	LS
pH by SM4500HB	5.72	0.00	S.U.	9/21/16 16:01	PRC
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	LESS THAN	0.5	mg/L	10/4/16 03:41	LS
Total Dissolved Solid-SM2540C	33	2.0	mg/L	9/22/16 10:40	PRC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23740**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: September 19, 2016 12:30
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	1.8	1.0	ppb	9/27/16 10:48	MC
Barium (CWA) 200.7	198	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	Less than	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	16200	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	1.1	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	2.2	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	5.4	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23741**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: September 19, 2016 12:35
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP101TM

AP1-01

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Barium (CWA) 200.7	209	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	1250	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	47800	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	6.4	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23742**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: September 19, 2016 14:35
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP102TM

AP1-02

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	280	5.0	ppb	9/27/16 15:47	MC
Barium (CWA) 200.7	179	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	Less than	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	71100	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	57.1	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23743**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: September 19, 2016 14:50
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAG01TM

MW 1

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Barium (CWA) 200.7	53.7	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	Less than	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	721	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	1.5	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23745**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: September 19, 2016 16:15
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP104TM

AP1-04

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	6.1	1.0	ppb	9/27/16 10:48	MC
Barium (CWA) 200.7	149	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	2590	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	110000	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23746**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: September 19, 2016 17:40
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP103TM

AP1-03

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	1170	20.0	ppb	9/27/16 15:47	MC
Barium (CWA) 200.7	122	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	1080	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	64500	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	21.4	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23747**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: September 19, 2016 17:40
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	1.9	1.0	ppb	9/27/16 10:48	MC
Barium (CWA) 200.7	199	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	Less than	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	12600	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	1.0	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	2.3	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB23748**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: September 19, 2016 18:50
 Date & Time Submitted: September 20, 2016 15:40
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 160921001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Barium (CWA) 200.7	79.0	10.0	ppb	9/22/16 15:09	MC
Beryllium EPA 200.7	Less than	2.0	ppb	9/22/16 15:09	MC
Boron - EPA 200.7	Less than	1000	ppb	9/22/16 15:09	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Calcium EPA 200.7	803	100	ppb	9/22/16 15:09	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC
Cobalt by ICP_MS EPA 200.8	1.5	1.0	ppb	9/27/16 10:48	MC
Lead by ICP-MS EPA 200.8	1.0	1.0	ppb	9/27/16 10:48	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	9/22/16 15:37	CB
Molybdenum - EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	9/27/16 10:48	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	9/27/16 10:48	MC

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 11/15/2016

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		4.810	4.570
Field Sp. Conductivity micromhos/cm		58.000	62.000
Field Turbidity NTU		1.30	5.80
ORP mV		293.000	260.000
Oxygen, dissolved mg/L		3.970	3.070
Temp (Celcius) degrees C		20.170	14.590
Water level elevation ft		113.69	115.02

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 11/15/2016

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-02	MW-AP-03	MW-AP-04	MW-AP-05	MW-AP-08
NAME	Lab. Certificate No.	32006	32006	32006	32006	32006
Field pH S.U.		6.880	7.010	6.820	6.450	6.050
Field Sp. Conductivity micromhos/cm		607.000	565.000	827.000	456.000	581.000
Field Turbidity NTU		7.20	7.40	6.10	6.90	1.90
ORP mV		-40.000	-56.000	-41.000	-9.000	13.000
Oxygen, dissolved mg/L		0.480	0.570	0.450	0.450	0.370
Temp (Celcius) degrees C		19.190	18.990	19.860	19.850	19.510
Water level elevation ft		84.01	85.58	85.22	80.08	80.29

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 11/16/2016

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01
NAME	Lab. Certificate No.	32006
Field pH S.U.		6.970
Field Sp. Conductivity micromhos/cm		801.000
Field Turbidity NTU		4.20
ORP mV		-72.000
Oxygen, dissolved mg/L		0.460
Temp (Celcius) degrees C		20.990
Water level elevation ft		87.37

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 411026 GEL Work Order: 411026

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
- H Analytical holding time was exceeded
- J Value is estimated
- U Analyte was analyzed for but not detected above the Lc
- 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.



Reviewed by _____

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FGD-1	Project: SCEG01716c
Sample ID: 411026001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 15-NOV-16 08:05	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	12/07/16	1649	1618153	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	2.33	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2320	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		2.26	1.08	3.00	pCi/L			AXM6	12/13/16	1124	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.98	0.373	1.00	pCi/L			LXP1	12/14/16	0815	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			97.4	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-1A	Project: SCEG01716c
Sample ID: 411026002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 15-NOV-16 09:05	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0396	0.033	0.100	mg/L		1	MAR1	12/07/16	1718	1618153	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2331	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		3.42	2.09	3.00	pCi/L			AXM6	12/13/16	1124	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.755	0.362	1.00	pCi/L			LXP1	12/14/16	0815	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.9	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-8	Project: SCEG01716c
Sample ID: 411026003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 15-NOV-16 12:20	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.332	0.033	0.100	mg/L		1	MAR1	12/07/16	1747	1618153	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		14.2	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2333	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		2.30	1.50	3.00	pCi/L			AXM6	12/13/16	1124	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.34	0.364	1.00	pCi/L			LXP1	12/14/16	0815	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.3	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-05	Project: SCEG01716c
Sample ID: 411026004	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 15-NOV-16 13:25	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0839	0.033	0.100	mg/L		1	MAR1	12/07/16	1815	1618153	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2336	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.56	1.52	3.00	pCi/L			AXM6	12/13/16	1125	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.396	0.271	1.00	pCi/L			LXP1	12/14/16	0815	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.3	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-04	Project: SCEG01716c
Sample ID: 411026005	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 15-NOV-16 14:35	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.357	0.033	0.100	mg/L		1	MAR1	12/07/16	1844	1618153	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2344	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.52	3.00	pCi/L			AXM6	12/13/16	1125	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.59	0.364	1.00	pCi/L			LXP1	12/14/16	0815	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			91.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-03	Project: SCEG01716c
Sample ID: 411026006	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 15-NOV-16 15:50	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.759	0.033	0.100	mg/L		1	MAR1	12/07/16	1913	1618153	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		80.0	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2346	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.76	3.00	pCi/L			AXM6	12/13/16	1125	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.07	0.248	1.00	pCi/L			LXP1	12/14/16	0815	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.4	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-02	Project: SCEG01716c
Sample ID: 411026007	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 15-NOV-16 16:45	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.391	0.033	0.100	mg/L		1	MAR1	12/07/16	1942	1618153	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		21.3	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2349	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.70	3.00	pCi/L			AXM6	12/13/16	1127	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.608	0.427	1.00	pCi/L			LXP1	12/14/16	0815	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			95.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FB-01	Project: SCEG01716c
Sample ID: 411026008	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 16-NOV-16 07:20	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	12/08/16	0100	1618154	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2352	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.66	3.00	pCi/L			AXM6	12/13/16	1127	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.340	1.00	pCi/L			LXP1	12/14/16	0850	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			97.9	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-01	Project: SCEG01716c
Sample ID: 411026009	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 16-NOV-16 08:05	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.334	0.033	0.100	mg/L		1	MAR1	12/08/16	0227	1618154	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2354	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.36	3.00	pCi/L			AXM6	12/13/16	1127	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.754	0.265	1.00	pCi/L			LXP1	12/14/16	0850	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			104	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: December 14, 2016

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-99	Project: SCEG01716c
Sample ID: 411026010	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 16-NOV-16 08:15	
Receive Date: 18-NOV-16	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.339	0.033	0.100	mg/L		1	MAR1	12/08/16	0256	1618154	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	11/28/16	2357	1617950	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.43	1.38	3.00	pCi/L			AXM6	12/13/16	1127	1619875	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.535	0.432	1.00	pCi/L			LXP1	12/14/16	0850	1620874	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	11/21/16	1620	1617949

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.9	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: December 14, 2016

Page 1 of 4

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 411026

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1618153										
QC1203674927	411027002	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		MAR1	12/07/16	22:07
QC1203674926	LCS										
Fluoride	2.50				2.53	mg/L	101	(90%-110%)		12/07/16	16:21
QC1203674925	MB										
Fluoride			U		ND	mg/L				12/07/16	15:52
QC1203674928	411027002	PS									
Fluoride	2.50	U	ND		2.54	mg/L	102	(90%-110%)		12/07/16	22:36
Batch	1618154										
QC1203674931	411026008	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		MAR1	12/08/16	01:29
QC1203674932	411027007	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A			12/08/16	08:43
QC1203674930	LCS										
Fluoride	2.50				2.56	mg/L	103	(90%-110%)		12/08/16	00:31
QC1203674929	MB										
Fluoride			U		ND	mg/L				12/08/16	00:02
QC1203674933	411026008	PS									
Fluoride	2.50	U	ND		2.45	mg/L	97.9	(90%-110%)		12/08/16	01:58
QC1203674934	411027007	PS									
Fluoride	2.50	U	ND		2.55	mg/L	102	(90%-110%)		12/08/16	09:12
Metals Analysis - ICPMS											
Batch	1617950										
QC1203674269	411026001	DUP									
Lithium		J	2.33	J	2.25	ug/L	3.58 ^	(+/-10.0)	BAJ	11/28/16	23:23
QC1203674268	LCS										
Lithium	50.0				50.4	ug/L	101	(80%-120%)		11/28/16	23:17
QC1203674267	MB										
Lithium			U		ND	ug/L				11/28/16	23:15
QC1203674271	411026001	MS									
					55.2			(75%-125%)			

GEL LABORATORIES LLC

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

QC Summary

Workorder: 411026

Page 2 of 4

Parname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1617950										
Lithium	50.0	J	2.33		ug/L		106			11/28/16	23:25
QC1203674273	411026001	SDILT									
Lithium		J	2.33	U	ND	ug/L	N/A	(0%-10%)	BAJ	11/28/16	23:28
Batch	1620155										
QC1203680215	410911011	DUP									
Lithium		U	ND	J	2.10	ug/L	200		BAJ	11/30/16	19:13
QC1203680214	LCS										
Lithium	50.0				50.1	ug/L	100	(80%-120%)		11/30/16	19:07
QC1203680213	MB										
Lithium			U		ND	ug/L				11/30/16	19:05
QC1203680216	410911011	MS									
Lithium	50.0	U	ND		47.2	ug/L	90.4	(75%-125%)		11/30/16	19:15
QC1203680217	410911011	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		11/30/16	19:18
Rad Gas Flow											
Batch	1619875										
QC1203679413	411026008	DUP									
Radium-228		U	1.52	U	1.30	pCi/L	N/A		N/A AXM6	12/13/16	11:28
QC1203679414	LCS										
Radium-228	21.5				24.0	pCi/L	111	(75%-125%)		12/13/16	11:30
QC1203679412	MB										
Radium-228			U		0.751	pCi/L				12/13/16	11:28
Rad Ra-226											
Batch	1620874										
QC1203682147	411026001	DUP									
Radium-226			1.98		1.32	pCi/L	40.5*	(0%-20%)	LXP1	12/14/16	09:20
QC1203682149	LCS										
Radium-226	24.4				20.4	pCi/L	83.8	(75%-125%)		12/14/16	09:20
QC1203682146	MB										
Radium-226					0.327	pCi/L				12/14/16	09:20
QC1203682148	411026001	MS									
Radium-226	122		1.98		122	pCi/L	98.2	(75%-125%)		12/14/16	09:20

GEL LABORATORIES LLC

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

QC Summary

Workorder: 411026

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
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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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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 Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for but not detected above the Lc
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- UJ Gamma Spectroscopy--Uncertain identification
- UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.
- X 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.
- Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
- ^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
- d 5-day BOD--The 2:1 depletion requirement was not met for this sample

GEL LABORATORIES LLC

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

QC Summary

Workorder: 411026

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
e		5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes									
h		Preparation or preservation holding time was exceeded									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.

Page: 1 of 2
 Project #: _____
 GEL Quote #: _____
 CQC Number (1): _____
 PO Number: _____

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

GEL Chain of Custody and Analytical Request

GEL Work Order Number: 411020

Client Name: SCANA Phone #: _____
 Project/Site Name: Watersee CCR FGD/API Fax #: _____
 Address: _____

Sample Analysis Requested ⁽⁵⁾ (Fill in the number of containers for each test)

Sample ID <i>* For composites - indicate start and stop date/time</i>	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (2)	Field Filtered (3)	Sample Matrix (4)	Should this sample be considered:		Total number of containers	NI	NI	<- Preservative Type (6)	Comments
						Radioactive	TSCA Regulated					
FGD-01	11/15/16	0805	2	N	GW			3	1	1		
MW-1A	11/15/16	0905	2	N	GW			3	1	1		
MW-8	11/15/16	1220	2	N	GW			3	1	1		
API-05	11/15/16	1325	2	N	GW			3	1	1		
API-04	11/15/16	1435	2	N	GW			3	1	1		
API-03	11/15/16	1550	2	N	GW			3	1	1		
API-02	11/15/16	1645	2	N	GW			3	1	1		
FB-01	11/16/16	0720	2	N	GW			3	1	1		
API-01	11/16/16	0805	2	N	GW			3	1	1		
API-99	11/16/16	0815	2	N	GW			3	1	1		

TAT Requested: Normal: Rush: _____ Specify: _____ (Subject to Surcharges) Fax Results: Yes / No Circle Deliverable: C of A / QC Summary / Level 1 / Level 2 / Level 3 / Level 4

Remarks: *Are there any known hazards applicable to these samples? If so, please list the hazards*
use EPA methods

Chain of Custody Signatures			Sample Shipping and Delivery Details		
Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
<u>[Signature]</u>	<u>11/17/16</u>	<u>0810</u>	<u>[Signature]</u>	<u>11/17/16</u>	<u>0810</u>
<u>[Signature]</u>	<u>11/15/16</u>	<u>1645</u>	<u>[Signature]</u>	<u>11/18/16</u>	<u>1048</u>
<u>[Signature]</u>	<u>11/16/16</u>	<u>1355</u>	<u>[Signature]</u>	<u>11-18-16</u>	<u>1355</u>

1.) Chain of Custody Number = Client Determined
 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
 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.
 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Waste Water, W=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Fecl, N=Nasal
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
 6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

WHITE = LABORATORY
 YELLOW = FILE
 PINK = CLIENT
 For Lab Receiving Use Only
 Custody Seal Intact?
 YES NO
 Cooler Temp:
0.7 C
 metals = 14.3°C

GEL Chain of Custody and Analytical Request

GEL Laboratories, LLC
 2040 Savage Road
 Charleston, SC 29407
 Phone: (843) 556-8171
 Fax: (843) 766-1178

GEL Work Order Number: 411024

Client Name: SCANA Phone #: _____
 Project/Site Name: Water CCR FGD/API Fax #: _____
 Address: _____

Sample ID	*Date Collected (mm-dd-yy)	*Time Collected (Military) (hhmm)	QC Code (h)	Field Filtered (h)	Sample Matrix (d)	Should this sample be considered:		Total number of containers	Sample Analysis Requested (5) (Fill in the number of containers for each test)				Comments	
						Radioactive	TSCA Regulated		NI	M	NI	M		<- Preservative Type (6)
FGD-02	11/16/16	0925	N	N	GW			3	1	1	1			
FGD-03	11/16/16	1025	N	N	GW			3	1	1	1			
FGD-04	11/16/16	1105	N	N	GW			3	1	1	1			
FGD-05	11/16/16	1230	N	N	GW			3	1	1	1			

Collected by: Aaron Hill Send Results To: _____

Sample ID
 * For composites - indicate start and stop date/time

TAT Requested: Normal: Rush: _____ Specify: _____ (Subject to Surchage) Fax Results: Yes / No
 Remarks: Are there any known hazards applicable to these samples? If so, please list the hazards
use EPA Methods

Chain of Custody Signatures		Sample Shipping and Delivery Details	
Relinquished By (Signed)	Date	Received by (signed)	Date
<u>[Signature]</u>	11/17/16 0810	<u>[Signature]</u>	11/17/16 0810
<u>[Signature]</u>	11/18/16 1048	<u>[Signature]</u>	11/18/16 1048
<u>[Signature]</u>	11/18/16 1355	<u>[Signature]</u>	11-18-16 1355

GEL PM: _____
 Method of Shipment: _____ Date Shipped: _____
 Airbill #: _____
 Airbill #: _____

1.) Chain of Custody Number = Client Determined
 2.) QC Codes: N = Normal Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike Sample, MSD = Matrix Spike Duplicate Sample, G = Grab, C = Composite
 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.
 4.) Matrix Codes: DW=Drinking Water, GW=Groundwater, SW=Surface Water, WW=Water, SO=Soil, SD=Sediment, SL=Sludge, SS=Solid Waste, O=Oil, F=Filter, P=Wipe, U=Urine, F=Faecal, N=Nasal
 5.) Sample Analysis Requested: Analytical method requested (i.e. 8260B, 6010B/7470A) and number of containers provided for each (i.e. 8260B - 3, 6010B/7470A - 1).
 6.) Preservative Type: HA = Hydrochloric Acid, NI = Nitric Acid, SH = Sodium Hydroxide, SA = Sulfuric Acid, AA = Ascorbic Acid, HX = Hexane, ST = Sodium Thiosulfate, If no preservative is added = leave field blank

For Lab Receiving Use Only
 Custody Seal Intact? YES NO
 Cooler Temp: 0.7 C
metals = 14.3 C

SAMPLE RECEIPT & REVIEW FORM

Client: SCEG		SDG/AR/COC/Work Order: 411024
Received By: SB		Date Received: 18-NOV-2016
Suspected Hazard Information	Yes <input type="checkbox"/> No <input type="checkbox"/>	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?	<input checked="" type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Area Background Counts): SCPM
Classified Radioactive II or III by RSO?	<input checked="" type="checkbox"/>	If yes, Were swipes taken of sample containers < action levels?
COC/Samples marked containing PCBs?	<input checked="" type="checkbox"/>	
Package, COC, and/or Samples marked as beryllium or asbestos containing?	<input checked="" type="checkbox"/>	If yes, samples are to be segregated as Safety Controlled Samples, and opened by the GEL Safety Group.
Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?	<input checked="" type="checkbox"/>	

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input checked="" type="checkbox"/>			Preservation Method: <u>Ice bags</u> Blue ice Dry ice <u>None</u> Other (describe) *all temperatures are recorded in Celsius SEE TEMPS BELOW
2a Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): E5102009188
3 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			
4 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6 Do Low Level Perchlorate samples have headspace as required?			<input checked="" type="checkbox"/>	Sample ID's and containers affected:
7 VOA vials contain acid preservation?			<input checked="" type="checkbox"/>	(If unknown, select No)
8 VOA vials free of headspace (defined as < 6mm bubble)?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
9 Are Encore containers present?			<input checked="" type="checkbox"/>	(If yes, immediately deliver to Volatiles laboratory)
10 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
11 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			Sample ID's and containers affected:
12 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Sample ID's affected:
13 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Sample ID's affected:
14 Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>			
15 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			
16 Carrier and tracking number.				Circle Applicable: FedEx Air FedEx Ground UPS <u>Field Services</u> Courier Other 22°C, 21°C, 21°C, 21°C, 1°C, 2°C

Comments (Use Continuation Form if needed):

Technical Case Narrative
GEL Engineering, LLC (GEEL)
SDG #: 411026

Metals

Product: Determination of Metals by ICP-MS

Analytical Method: EPA 200.8 SC_NPDES

Analytical Procedure: GL-MA-E-014 REV# 28

Analytical Batch: 1617950

Preparation Method: EPA 200.2

Preparation Procedure: GL-MA-E-016 REV# 16

Preparation Batch: 1617949

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
411026001	FGD-1
411026002	MW-1A
411026003	MW-8
411026004	API-05
411026005	API-04
411026006	API-03
411026007	API-02
411026008	FB-01
411026009	API-01
411026010	API-99
1203674267	Method Blank (MB) ICP-MS
1203674268	Laboratory Control Sample (LCS)
1203674273	411026001(FGD-1L) Serial Dilution (SD)
1203674269	411026001(FGD-1D) Sample Duplicate (DUP)
1203674271	411026001(FGD-1S) Matrix Spike (MS)

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.

Product: Determination of Metals by ICP-MS

Analytical Method: EPA 200.8 SC_NPDES

Analytical Procedure: GL-MA-E-014 REV# 28

Analytical Batch: 1620155

Preparation Method: EPA 200.2

Preparation Procedure: GL-MA-E-016 REV# 16

Preparation Batch: 1620154

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
411026011	FGD-02
411026012	FGD-03
411026013	FGD-04
411026014	FGD-05
1203680213	Method Blank (MB)ICP-MS
1203680214	Laboratory Control Sample (LCS)
1203680217	410911011(NonSDGL) Serial Dilution (SD)
1203680215	410911011(NonSDGD) Sample Duplicate (DUP)
1203680216	410911011(NonSDGS) Matrix Spike (MS)

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.

General Chemistry

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 25

Analytical Batch: 1618153

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
411026001	FGD-1
411026002	MW-1A
411026003	MW-8
411026004	API-05
411026005	API-04
411026006	API-03
411026007	API-02
1203674925	Method Blank (MB)
1203674926	Laboratory Control Sample (LCS)
1203674927	411027002(MW-6LF) Sample Duplicate (DUP)
1203674928	411027002(MW-6LF) Post Spike (PS)

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.

Product: Ion Chromatography

Analytical Method: EPA 300.0

Analytical Procedure: GL-GC-E-086 REV# 25

Analytical Batch: 1618154

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
411026008	FB-01
411026009	API-01
411026010	API-99
411026011	FGD-02
411026012	FGD-03
411026013	FGD-04
411026014	FGD-05
1203674929	Method Blank (MB)
1203674930	Laboratory Control Sample (LCS)
1203674931	411026008(FB-01) Sample Duplicate (DUP)
1203674932	411027007(MW-11LF) Sample Duplicate (DUP)
1203674933	411026008(FB-01) Post Spike (PS)
1203674934	411027007(MW-11LF) Post Spike (PS)

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.

Miscellaneous Information

Manual Integrations

Samples 1203674932 (MW-11LFDUP), 411026011 (FGD-02), 411026013 (FGD-04) and 411026014 (FGD-05) were manually integrated to correctly position the baseline as set in the calibration standards.

Radiochemistry

Product: GFPC, Ra228, Liquid

Analytical Method: EPA 904.0/SW846 9320 Modified

Analytical Procedure: GL-RAD-A-009 REV# 17

Analytical Batch: 1619875

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
411026001	FGD-1
411026002	MW-1A
411026003	MW-8
411026004	API-05
411026005	API-04
411026006	API-03
411026007	API-02
411026008	FB-01
411026009	API-01

411026010	API-99
411026011	FGD-02
411026012	FGD-03
411026013	FGD-04
411026014	FGD-05
1203679412	Method Blank (MB)
1203679413	411026008(FB-01) Sample Duplicate (DUP)
1203679414	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.

Product: Lucas Cell, Ra226, liquid

Analytical Method: EPA 903.1 Modified

Analytical Procedure: GL-RAD-A-008 REV# 14

Analytical Batch: 1620874

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

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
411026001	FGD-1
411026002	MW-1A
411026003	MW-8
411026004	API-05
411026005	API-04
411026006	API-03
411026007	API-02
411026008	FB-01
411026009	API-01
411026010	API-99
411026011	FGD-02
411026012	FGD-03
411026013	FGD-04
411026014	FGD-05
1203682146	Method Blank (MB)
1203682147	411026001(FGD-1) Sample Duplicate (DUP)
1203682148	411026001(FGD-1) Matrix Spike (MS)
1203682149	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.

Quality Control (QC) Information

QC Information

All of the QC samples meet the required acceptance limits with the following exceptions: The sample and the duplicate, 1203682147 (FGD-1DUP) and 411026001 (FGD-1), did not meet the relative percent difference requirement; however, they do meet the relative error ratio requirement with a value of 1.7699.

Miscellaneous Information

Additional Comments

The matrix spike, 1203682148 (FGD-1MS), aliquot was reduced to conserve sample volume.

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.



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24618**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: November 15, 2016 08:05
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAFGD01TDS

FGD-01

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	7.21	0.5	mg/L	11/23/16 23:50	LS
pH by SM4500HB	5.07	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	LESS THAN	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	49	2.0	mg/L	11/18/16 13:00	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24619**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: November 15, 2016 09:05
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAG01TDS

MW 1

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.41	0.5	mg/L	11/23/16 23:50	LS
pH by SM4500HB	4.66	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	LESS THAN	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	36	2.0	mg/L	11/18/16 13:00	BF

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24620**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: November 15, 2016 12:20
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.14	0.5	mg/L	11/23/16 23:50	LS
pH by SM4500HB	5.05	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	LESS THAN	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	380	2.0	mg/L	11/18/16 13:00	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24621**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: November 15, 2016 13:25
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	19.6	0.5	mg/L	11/23/16 23:50	LS
pH by SM4500HB	6.32	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	0.934	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	250	2.0	mg/L	11/18/16 13:00	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24622**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: November 15, 2016 14:35
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP104TDS

AP1-04

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	16.8	0.5	mg/L	11/23/16 23:50	LS
pH by SM4500HB	6.68	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	less than	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	432	2.0	mg/L	11/18/16 13:00	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24623**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: November 15, 2016 15:50
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP103TDS

AP1-03

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	20.7	0.5	mg/L	11/23/16 23:50	LS
pH by SM4500HB	6.76	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	55.4	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	320	2.0	mg/L	11/18/16 13:00	BF

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24624**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: November 15, 2016 16:45
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP102TDS

AP1-02

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	105	1.0	mg/L	11/23/16 23:50	LS
pH by SM4500HB	6.70	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	51.979	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	419	2.0	mg/L	11/18/16 13:00	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24626**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: November 16, 2016 08:05
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP101TDS

AP1-01

Login Record File: 161117004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	157	1.0	mg/L	11/23/16 23:50	LS
pH by SM4500HB	6.73	0.00	S.U.	11/17/16 12:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	8.626	0.5	mg/L	11/23/16 23:50	LS
Total Dissolved Solid-SM2540C	412	2.0	mg/L	11/18/16 13:00	BF

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

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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24596**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: November 15, 2016 08:05
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Barium (CWA) 200.7	78.9	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	Less than	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	Less than	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	821	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	1.3	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	1.0	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	Less than	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24597**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: November 15, 2016 09:05
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAG01TM

MW 1

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Barium (CWA) 200.7	55.5	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	Less than	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	Less than	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	732	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	1.6	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	Less than	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24598**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: November 15, 2016 12:20
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	8.6	1.0	ppb	11/17/16 16:03	MC
Barium (CWA) 200.7	137	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	3.5	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	Less than	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	23400	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	24.3	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	11.4	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	18.5	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____



Central Laboratory (P-08)
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24599**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: November 15, 2016 13:25
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	2.3	1.0	ppb	11/17/16 16:03	MC
Barium (CWA) 200.7	184	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	Less than	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	Less than	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	12300	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	1.3	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	Less than	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24600**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: November 15, 2016 14:35
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP104TM

AP1-04

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	8.0	1.0	ppb	11/17/16 16:03	MC
Barium (CWA) 200.7	159	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	Less than	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	2630	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	115000	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	Less than	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24601**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: November 15, 2016 15:50
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP103TM

AP1-03

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	1340	20.0	ppb	11/21/16 15:21	MC
Barium (CWA) 200.7	120	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	Less than	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	1070	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	61600	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	80.1	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	19.9	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24602**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: November 15, 2016 16:45
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP102TM

AP1-02

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	330	1.0	ppb	11/17/16 16:03	MC
Barium (CWA) 200.7	166	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	Less than	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	1020	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	66200	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	20.3	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	51.2	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB24604**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: November 16, 2016 08:05
 Date & Time Submitted: November 17, 2016 08:10
 Collected by: A.HILL Location Code: WAAP101TM

AP1-01

Login Record File: 161117002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Arsenic by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Barium (CWA) 200.7	215	10.0	ppb	11/17/16 14:46	MC
Beryllium EPA 200.7	Less than	2.0	ppb	11/17/16 14:46	MC
Boron - EPA 200.7	1330	1000	ppb	11/17/16 14:46	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Calcium EPA 200.7	48500	100	ppb	11/17/16 14:46	MC
Chromium by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Cobalt by ICP_MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lead by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC
Lithium (CWA) 200.7	Less than	10.0	ppb	11/17/16 14:57	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	11/18/16 13:52	PRC
Molybdenum - EPA 200.8	5.6	1.0	ppb	11/17/16 16:03	MC
Selenium by ICP-MS EPA 200.8	Less than	5.0	ppb	11/17/16 16:03	MC
Thallium by ICP-MS EPA 200.8	Less than	1.0	ppb	11/17/16 16:03	MC

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 01/17/2017

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		4.630	4.680
Field Sp. Conductivity micromhos/cm		42.000	53.000
Field Turbidity NTU		2.18	2.23
ORP mV		172.700	166.200
Oxygen, dissolved mg/L		4.110	2.290
Temp (Celcius) degrees C		19.270	19.910
Water level elevation ft		115.48	116.26

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 01/18/2017

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04	MW-AP-05	MW-AP-08
NAME	Lab. Certificate No.	32006	32006	32006	32006	32006	32006
Field pH S.U.		6.690	6.480	6.570	6.530	5.810	5.710
Field Sp. Conductivity micromhos/cm		734.000	566.000	601.000	728.000	498.000	528.000
Field Turbidity NTU		3.22	6.15	0.78	7.54	7.00	5.30
ORP mV		-117.500	-104.200	-107.600	-114.700	-26.700	7.900
Oxygen, dissolved mg/L		0.380	0.400	0.310	0.610	0.380	0.440
Temp (Celcius) degrees C		22.250	20.280	20.810	18.950	19.470	20.340
Water level elevation ft		88.64	85.68	87.20	87.19	82.89	83.04

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 414773 GEL Work Order: 414773

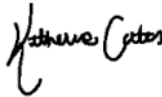
The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- H Analytical holding time was exceeded
- J Value is estimated
- U Analyte was analyzed for but not detected above the Lc
- 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.



Reviewed by _____

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FGD-01	Project: SCEG01716c
Sample ID: 414773008	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 17-JAN-17 15:20	
Receive Date: 20-JAN-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	01/25/17	0941	1633301	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	2.53	2.00	10.0	ug/L	1.00	1	BAJ	01/25/17	2004	1633222	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.95	1.49	3.00	pCi/L			AXM6	02/10/17	1239	1635132	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.50	0.374	1.00	pCi/L			LXP1	02/09/17	0930	1633271	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	01/23/17	0839	1633221

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-01	Project: SCEG01716c
Sample ID: 414773009	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 18-JAN-17 13:55	
Receive Date: 20-JAN-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.372	0.033	0.100	mg/L		1	MAR1	01/25/17	1010	1633301	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	01/25/17	2014	1633222	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.50	3.00	pCi/L			AXM6	02/10/17	1239	1635132	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.446	1.00	pCi/L			LXP1	02/09/17	0930	1633271	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	01/23/17	0839	1633221

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.4	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 16, 2017

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: API-99 Project: SCEG01716c
Sample ID: 414773010 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 18-JAN-17 14:15
Receive Date: 20-JAN-17
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.361	0.033	0.100	mg/L		1	MAR1	01/25/17	1038	1633301	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	01/25/17	2030	1633222	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.55	3.00	pCi/L			AXM6	02/10/17	1239	1635132	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.685	0.328	1.00	pCi/L			LXP1	02/09/17	0930	1633271	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	01/23/17	0839	1633221

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-02	Project: SCEG01716c
Sample ID: 414773011	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 18-JAN-17 15:45	
Receive Date: 20-JAN-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.430	0.033	0.100	mg/L		1	MAR1	01/25/17	1107	1633301	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		23.7	2.00	10.0	ug/L	1.00	1	BAJ	01/25/17	2033	1633222	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.59	3.00	pCi/L			AXM6	02/10/17	1239	1635132	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.06	0.423	1.00	pCi/L			LXP1	02/09/17	0930	1633271	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	01/23/17	0839	1633221

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.1	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-03	Project: SCEG01716c
Sample ID: 414773012	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 18-JAN-17 16:25	
Receive Date: 20-JAN-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.672	0.033	0.100	mg/L		1	MAR1	01/25/17	1136	1633301	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		80.7	2.00	10.0	ug/L	1.00	1	BAJ	01/25/17	2035	1633222	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.04	3.00	pCi/L			AXM6	02/10/17	1239	1635132	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.17	0.272	1.00	pCi/L			LXP1	02/09/17	0930	1633271	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	01/23/17	0839	1633221

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: February 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: API-04	Project: SCEG01716c
Sample ID: 414773013	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 18-JAN-17 17:40	
Receive Date: 20-JAN-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.259	0.033	0.100	mg/L		1	MAR1	01/25/17	1205	1633301	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	01/25/17	2038	1633222	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	2.56	3.00	pCi/L			AXM6	02/10/17	1328	1635132	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.08	0.470	1.00	pCi/L			LXP1	02/09/17	0930	1633271	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	01/23/17	0839	1633221

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 9056A	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			81.7	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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QC Summary

Report Date: February 16, 2017

Page 1 of 6

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 414773

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1633027										
QC1203712222	414666010	DUP									
Fluoride		0.723		0.727	mg/L	0.551		(0%-20%)	MAR1	01/24/17	22:36
QC1203714085	414775003	DUP									
Fluoride		0.288		0.290	mg/L	0.865 ^		(+/-0.100)		01/25/17	01:30
QC1203712221	LCS										
Fluoride	2.50			2.53	mg/L		101	(90%-110%)		01/24/17	16:21
QC1203712220	MB										
Fluoride			U	ND	mg/L					01/24/17	15:52
QC1203712223	414666010	PS									
Fluoride	2.50	0.723		3.20	mg/L		99.1	(90%-110%)		01/24/17	23:05
QC1203714086	414775003	PS									
Fluoride	2.50	0.288		2.75	mg/L		98.3	(90%-110%)		01/25/17	01:59
<hr/>											
Batch	1633301										
QC1203712955	414773001	DUP									
Fluoride			U	ND	U	ND	mg/L	N/A		MAR1	01/25/17 04:52
QC1203712956	414773020	DUP									
Fluoride			U	ND	U	ND	mg/L	N/A			01/25/17 16:54
QC1203712954	LCS										
Fluoride	2.50			2.55	mg/L		102	(90%-110%)		01/25/17	03:54
QC1203712953	MB										
Fluoride			U	ND	mg/L					01/25/17	03:25

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QC Summary

Workorder: 414773

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1633301										
QC1203712957	414773001	PS									
Fluoride	2.50	U	ND	2.51	mg/L		99.6	(90%-110%)	MAR1	01/25/17	05:21
QC1203712958	414773020	PS									
Fluoride	2.50	U	ND	2.50	mg/L		99	(90%-110%)		01/25/17	17:23
Metals Analysis - ICPMS											
Batch	1633220										
QC1203712682	414773001	DUP									
Lithium		U	ND	U	ND	ug/L	N/A		SKJ	01/30/17	11:43
QC1203712681	LCS										
Lithium	50.0			56.3	ug/L		113	(80%-120%)		01/30/17	11:40
QC1203712680	MB										
Lithium			U	ND	ug/L					01/30/17	11:39
QC1203712683	414773001	MS									
Lithium	50.0	U	ND	56.8	ug/L		112	(75%-125%)		01/30/17	11:45
QC1203712684	414773001	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		01/30/17	11:47
Batch	1633222										
QC1203712687	414773008	DUP									
Lithium		J	2.53	J	2.51	ug/L	0.555 ^	(+/-10.0)	BAJ	01/25/17	20:06
QC1203712688	414773009	DUP									
Lithium		U	ND	U	ND	ug/L	N/A			01/25/17	20:17
QC1203712686	LCS										
Lithium	50.0			48.5	ug/L		96.9	(80%-120%)		01/25/17	20:01

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QC Summary

Workorder: 414773

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1633222										
QC1203712685		MB									
Lithium			U	ND	ug/L				BAJ	01/25/17	19:58
QC1203712689	414773008	MS									
Lithium	50.0	J	2.53	51.6	ug/L		98.1	(75%-125%)		01/25/17	20:09
QC1203712690	414773009	MS									
Lithium	50.0	U	ND	45.2	ug/L		89.9	(75%-125%)		01/25/17	20:19
QC1203712691	414773008	SDILT									
Lithium		J	2.53	U	ND	ug/L	N/A	(0%-10%)		01/25/17	20:11
QC1203712692	414773009	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		01/25/17	20:22
Rad Gas Flow											
Batch	1635132										
QC1203717739	414773008	DUP									
Radium-228			1.95	1.23	pCi/L	45.1		(0% - 100%)	AXM6	02/10/17	12:43
QC1203717740	LCS										
Radium-228	21.1			19.4	pCi/L		92.1	(75%-125%)		02/10/17	12:43
QC1203717738	MB										
Radium-228			U	0.931	pCi/L					02/10/17	12:43
Batch	1635133										
QC1203717742	414773020	DUP									
Radium-228		U	0.393	3.34	pCi/L	158*		(0% - 100%)	AXM6	02/09/17	14:30
QC1203717743	LCS										
Radium-228	21.1			23.2	pCi/L		110	(75%-125%)		02/09/17	10:49

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QC Summary

Workorder: 414773

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	1635133										
QC1203717741	MB										
Radium-228			U	0.738	pCi/L				AXM6	02/09/17	10:49
Rad Ra-226											
Batch	1633270										
QC1203712844	414666001	DUP									
Radium-226			U	0.198	pCi/L	54.2		(0% - 100%)	LXP1	02/13/17	11:10
QC1203712846	LCS										
Radium-226	26.0			24.3	pCi/L		93.7	(75%-125%)		02/13/17	11:40
QC1203712843	MB										
Radium-226				0.314	pCi/L					02/13/17	11:10
QC1203712845	414666001	MS									
Radium-226	130	U		0.198	pCi/L		102	(75%-125%)		02/13/17	11:10
Batch	1633271										
QC1203712848	414773001	DUP									
Radium-226				0.783	pCi/L	20.9		(0% - 100%)	LXP1	02/09/17	10:37
QC1203712850	LCS										
Radium-226	26.0			20.3	pCi/L		78.1	(75%-125%)		02/09/17	10:37
QC1203712847	MB										
Radium-226			U	-0.0465	pCi/L					02/09/17	10:37
QC1203712849	414773001	MS									
Radium-226	130			0.783	pCi/L		104	(75%-125%)		02/09/17	10:37

Notes:

The Qualifiers in this report are defined as follows:

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

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QC Summary

Workorder: 414773

Page 5 of 6

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
>											
B											
BD											
E											
E											
FA											
FB											
H											
J											
K											
L											
M											
M											
N											
N/A											
N1											
ND											
NJ											
Q											
R											
R											
U											
U											
UI											
UJ											
UL											
X											
Y											
Z											
^											
d											
e											
h											

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QC Summary

Workorder: 414773

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<u>Parmname</u>	<u>NOM</u>	<u>Sample Qual</u>	<u>QC</u>	<u>Units</u>	<u>RPD%</u>	<u>REC%</u>	<u>Range</u>	<u>Anlst</u>	<u>Date</u>	<u>Time</u>
-----------------	------------	--------------------	-----------	--------------	-------------	-------------	--------------	--------------	-------------	-------------

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25317**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: January 17, 2017 17:00
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAG01TDS

MW 1

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.93	0.50	mg/L	1/25/17 00:56	EB
pH by SM4500HB	4.72	0.00	S.U.	1/23/17 10:47	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	0.83	0.50	mg/L	1/25/17 00:56	EB
Total Dissolved Solid-SM2540C	36	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25318**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: January 17, 2017 15:20

Date & Time Submitted: January 19, 2017 10:30

Collected by: S.SANSBURY Location Code: WAFGD01TDS

FGD-01

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	7.76	0.50	mg/L	1/25/17 00:56	EB
pH by SM4500HB	4.66	0.00	S.U.	1/23/17 10:47	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	1/25/17 00:56	EB
Total Dissolved Solid-SM2540C	29	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



Central Laboratory (P-08)
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25319**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: January 18, 2017 13:55
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP101TDS

AP1-01

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	167	5.0	mg/L	1/25/17 15:53	EB
pH by SM4500HB Holding Time of 15 minutes has been exceeded.	6.75	0.00	S.U.	1/23/17 10:47	BF
Sulfates by IC EPA 300.0	6.62	0.50	mg/L	1/25/17 15:53	EB
Total Dissolved Solid-SM2540C	399	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



Central Laboratory (P-08)
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 Columbia, SC 29212
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25321**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: January 18, 2017 15:45

Date & Time Submitted: January 19, 2017 10:30

Collected by: S.SANSBURY Location Code: WAAP102TDS

AP1-02

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	100	0.50	mg/L	1/25/17 15:53	EB
pH by SM4500HB	6.56	0.00	S.U.	1/23/17 10:47	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	39	0.50	mg/L	1/25/17 15:53	EB
Total Dissolved Solid-SM2540C	432	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25322**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: January 18, 2017 16:25
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP103TDS

AP1-03

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	68.8	0.50	mg/L	1/25/17 00:56	EB
pH by SM4500HB Holding Time of 15 minutes has been exceeded.	6.57	0.00	S.U.	1/23/17 10:47	BF
Sulfates by IC EPA 300.0	31.4	0.50	mg/L	1/25/17 00:56	EB
Total Dissolved Solid-SM2540C	396	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25323**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: January 18, 2017 17:40
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP104TDS

AP1-04

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	12.26	0.50	mg/L	1/25/17 00:56	EB
pH by SM4500HB	6.46	0.00	S.U.	1/23/17 10:47	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	1/25/17 00:56	EB
Total Dissolved Solid-SM2540C	471	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25324**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: January 18, 2017 18:22
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP105TDS

AP1-05

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	19.78	0.50	mg/L	1/25/17 00:56	EB
pH by SM4500HB	6.15	0.00	S.U.	1/23/17 10:47	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	1/25/17 00:56	EB
Total Dissolved Solid-SM2540C	240	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25325**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: January 18, 2017 17:22
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAG08TDS

MW 8

Login Record File: 170119002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	17.78	0.50	mg/L	1/25/17 00:56	EB
pH by SM4500HB	6.05	0.00	S.U.	1/23/17 10:47	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	95.3	0.50	mg/L	1/25/17 00:56	EB
Total Dissolved Solid-SM2540C	357	2.0	mg/L	1/23/17 13:53	CDB

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

Approved By: _____



Central Laboratory (P-08)
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 Columbia, SC 29212
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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25338**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: January 17, 2017 17:00
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAG01TM

MW 1

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	1.2	1.0	ppb	1/23/17 13:28	MC
Barium by ICP-OES 200.7	54.1	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	Less than	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	678	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lead by ICP-MS 200.8	1.3	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	1/23/17 13:28	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25339**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: January 17, 2017 15:20
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAFGD01TM

FGD-01

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	1.2	1.0	ppb	1/23/17 13:28	MC
Barium by ICP-OES 200.7	99.5	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	Less than	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	962	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Cobalt by ICP_MS 200.8	1.4	1.0	ppb	1/23/17 13:28	MC
Lead by ICP-MS 200.8	1.2	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	2.7	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	1/23/17 13:28	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25340**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: January 18, 2017 13:55
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP101TM

AP1-01

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	1.4	1.0	ppb	1/23/17 13:28	MC
Barium by ICP-OES 200.7	229	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	1380	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	52700	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	2.9	1.0	ppb	1/23/17 13:28	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	5.7	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	1/23/17 13:28	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25342**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: January 18, 2017 15:45
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP102TM

AP1-02

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	166	1.0	ppb	1/23/17 13:28	MC
Barium by ICP-OES 200.7	170	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	1000	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	64700	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	1.1	1.0	ppb	1/23/17 13:28	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	25.9	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	30.0	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	1/23/17 13:28	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25343**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: January 18, 2017 16:25
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP103TM

AP1-03

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	64.4	1.0	ppb	1/23/17 13:28	MC
Barium by ICP-OES 200.7	226	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	1630	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	113000	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	1/23/17 13:28	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25344**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: January 18, 2017 17:40
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP104TM

AP1-04

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	2.2	1.0	ppb	1/23/17 13:28	MC
Barium by ICP-OES 200.7	218	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	Less than	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	12500	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	1/23/17 13:28	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25345**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: January 18, 2017 18:22
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAAP105TM

AP1-05

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	2.2	1.0	ppb	1/23/17 13:28	MC
Barium by ICP-OES 200.7	218	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	Less than	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	12700	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	1/23/17 13:28	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB25346**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: January 18, 2017 17:22
 Date & Time Submitted: January 19, 2017 10:30
 Collected by: S.SANSBURY Location Code: WAG08TM

MW 8

Login Record File: 170119003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Arsenic by ICP_MS 200.8	7.6	2.0	ppb	1/23/17 15:21	MC
Barium by ICP-OES 200.7	167	10.0	ppb	1/23/17 08:38	MC
Beryllium EPA 200.7	3.8	2.0	ppb	1/23/17 08:38	MC
Boron - EPA 200.7	Less than	1000	ppb	1/23/17 08:38	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Calcium EPA 200.7	21300	100	ppb	1/23/17 08:38	MC
Chromium by ICP_MS 200.8	Less than	2.0	ppb	1/23/17 15:21	MC
Cobalt by ICP_MS 200.8	12.9	2.0	ppb	1/23/17 15:21	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Lithium (CWA) 200.7	10.5	2.0	ppb	1/23/17 08:38	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	1/24/17 15:58	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	1/23/17 13:28	MC
Selenium by ICP-MS 200.8	19.3	10.0	ppb	1/23/17 15:21	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	1/23/17 13:28	MC

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 03/20/2017

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		4.450	4.350
Field Sp. Conductivity micromhos/cm		40.000	47.000
Field Turbidity NTU		9.50	2.60
ORP mV		174.200	288.700
Oxygen, dissolved mg/L		4.600	3.070
Temp (Celcius) degrees C		18.680	18.110
Water level elevation ft		114.51	115.85

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 03/21/2017

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER NAME	NUMBER Lab. Certificate No.	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04	MW-AP-05	MW-AP-08
		32006	32006	32006	32006	32006	32006
Field pH S.U.		6.550	6.330	6.730	6.650	4.330	5.890
Field Sp. Conductivity micromhos/cm		719.000	639.000	577.000	687.000	73.000	475.000
Field Turbidity NTU		2.90	5.80	8.10	0.90	4.80	6.20
ORP mV		728.700	-88.000	-105.800	-102.100	277.300	-50.500
Oxygen, dissolved mg/L		0.640	0.480	0.310	0.700	1.030	1.670
Temp (Celcius) degrees C		21.060	22.290	22.710	22.110	19.130	18.230
Water level elevation ft		87.96	84.91	85.56	85.28	82.85	83.01

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 419050 GEL Work Order: 419050

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.

Reviewed by _____



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FGD-01	Project: SCEG01716c
Sample ID: 419050001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 20-MAR-17 13:35	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MXL2	03/23/17	0825	1649928	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	2.40	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1539	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.32	0.835	3.00	pCi/L			AXM6	04/12/17	1041	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.42	0.224	1.00	pCi/L			MXH8	04/14/17	0955	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.7	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-1A	Project: SCEG01716c
Sample ID: 419050002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 20-MAR-17 14:35	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MXL2	03/23/17	0852	1649928	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1551	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.979	0.782	3.00	pCi/L			AXM6	04/12/17	1041	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.664	0.319	1.00	pCi/L			MXH8	04/14/17	0955	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			99.5	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FB-01	Project: SCEG01716c
Sample ID: 419050003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 21-MAR-17 07:40	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MXL2	03/23/17	0919	1649928	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1554	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	0.575	3.00	pCi/L			AXM6	04/12/17	1041	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.317	1.00	pCi/L			MXH8	04/14/17	0955	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			97	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-08	Project: SCEG01716c
Sample ID: 419050004	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 21-MAR-17 08:25	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.311	0.033	0.100	mg/L		1	MXL2	03/23/17	2326	1649958	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		11.8	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1603	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.24	0.614	3.00	pCi/L			AXM6	04/12/17	1041	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.607	0.291	1.00	pCi/L			MXH8	04/14/17	0955	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			93.9	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: AP1-99 Project: SCEG01716c
Sample ID: 419050005 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 21-MAR-17 09:15
Receive Date: 22-MAR-17
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0729	0.033	0.100	mg/L		1	MXL2	03/24/17	0054	1649958	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1614	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.730	0.614	3.00	pCi/L			AXM6	04/12/17	1041	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.351	1.00	pCi/L			MXH8	04/14/17	0955	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			88.6	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-05	Project: SCEG01716c
Sample ID: 419050006	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 21-MAR-17 09:25	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0659	0.033	0.100	mg/L		1	MXL2	03/24/17	0124	1649958	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1617	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.599	0.504	3.00	pCi/L			AXM6	04/12/17	1041	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.519	0.311	1.00	pCi/L			MXH8	04/14/17	1025	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			92.9	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-01	Project: SCEG01716c
Sample ID: 419050007	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 21-MAR-17 12:05	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.311	0.033	0.100	mg/L		1	MXL2	03/24/17	0153	1649958	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1620	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.628	0.528	3.00	pCi/L			AXM6	04/12/17	1041	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.447	0.171	1.00	pCi/L			MXH8	04/14/17	1025	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.4	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-04	Project: SCEG01716c
Sample ID: 419050010	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 21-MAR-17 13:04	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.187	0.033	0.100	mg/L		1	MXL2	03/24/17	0420	1649958	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1635	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.15	0.515	3.00	pCi/L			AXM6	04/12/17	1044	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.33	0.344	1.00	pCi/L			MXH8	04/14/17	1025	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.7	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-02	Project: SCEG01716c
Sample ID: 419050011	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 21-MAR-17 13:45	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.372	0.033	0.100	mg/L		1	MXL2	03/24/17	0449	1649958	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		37.9	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1638	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.818	0.413	3.00	pCi/L			AXM6	04/12/17	1044	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.556	0.190	1.00	pCi/L			MXH8	04/14/17	1025	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			96.4	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: April 16, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-03	Project: SCEG01716c
Sample ID: 419050013	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 21-MAR-17 14:47	
Receive Date: 22-MAR-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.673	0.033	0.100	mg/L		1	MXL2	03/24/17	0548	1649958	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		98.1	2.00	10.0	ug/L	1.00	1	BAJ	03/28/17	1643	1649909	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		0.614	0.462	3.00	pCi/L			AXM6	04/12/17	1044	1651322	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.997	0.343	1.00	pCi/L			MXH8	04/14/17	1100	1651334	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	CXW4	03/22/17	1839	1649906

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			96.5	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: April 16, 2017

Page 1 of 4

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 419050

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1649928										
QC1203753083	419043001	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		MXL2	03/23/17	03:56
QC1203753082	LCS										
Fluoride	2.50				2.40	mg/L	96	(90%-110%)		03/23/17	03:02
QC1203753081	MB										
Fluoride			U		ND	mg/L				03/23/17	02:35
QC1203753084	419043001	PS									
Fluoride	2.50	U	ND		2.51	mg/L	99.8	(90%-110%)		03/23/17	04:23
Batch	1649958										
QC1203753188	419050004	DUP									
Fluoride			0.311		0.310	mg/L	0.483 ^	(+/-0.100)	MXL2	03/23/17	23:55
QC1203753189	419050014	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A			03/24/17	06:47
QC1203753187	LCS										
Fluoride	2.50				2.51	mg/L	101	(90%-110%)		03/23/17	22:57
QC1203753186	MB										
Fluoride			U		ND	mg/L				03/23/17	22:27
QC1203753190	419050004	PS									
Fluoride	2.50		0.311		2.71	mg/L	96.1	(90%-110%)		03/24/17	00:25
QC1203753191	419050014	PS									
Fluoride	2.50	U	ND		2.55	mg/L	101	(90%-110%)		03/24/17	07:17

GEL LABORATORIES LLC

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

QC Summary

Workorder: 419050

Page 2 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1649909										
QC1203753023	419050001	DUP									
Lithium	J	2.40	J	2.41	ug/L	0.583	^	(+/-10.0)	BAJ	03/28/17	15:42
QC1203753024	419050004	DUP									
Lithium		11.8		11.7	ug/L	0.767	^	(+/-10.0)		03/28/17	16:06
QC1203753022	LCS										
Lithium	50.0			51.9	ug/L			104 (80%-120%)		03/28/17	15:37
QC1203753021	MB										
Lithium			U	ND	ug/L					03/28/17	15:34
QC1203753025	419050001	MS									
Lithium	50.0	J	2.40	56.9	ug/L			109 (75%-125%)		03/28/17	15:45
QC1203753026	419050004	MS									
Lithium	50.0		11.8	62.0	ug/L			100 (75%-125%)		03/28/17	16:09
QC1203753027	419050001	SDILT									
Lithium	J	2.40	U	ND	ug/L	N/A		(0%-10%)		03/28/17	15:48
QC1203753028	419050004	SDILT									
Lithium		11.8	J	2.30	ug/L	2.37		(0%-10%)		03/28/17	16:11
Rad Gas Flow											
Batch	1651322										
QC1203756438	419050008	DUP									
Radium-228	U	0.183	U	0.533	pCi/L	N/A		N/A AXM6		04/12/17	11:57
QC1203756439	LCS										
Radium-228	6.89			7.20	pCi/L			104 (75%-125%)		04/12/17	10:46
QC1203756437	MB										
Radium-228			U	0.0782	pCi/L					04/12/17	10:45

GEL LABORATORIES LLC

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QC Summary

Workorder: 419050

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Ra-226											
Batch	1651334										
QC1203756467	419050012	DUP									
Radium-226		1.15		0.937	pCi/L	20.4		(0% - 100%)	MXH8	04/14/17	11:00
QC1203756469	LCS										
Radium-226	26.0			21.7	pCi/L		83.4	(75%-125%)		04/14/17	11:00
QC1203756466	MB										
Radium-226			U	0.00	pCi/L					04/14/17	11:00
QC1203756468	419050012	MS									
Radium-226	130	1.15		129	pCi/L		98.3	(75%-125%)		04/14/17	11:00

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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

GEL LABORATORIES LLC

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QC Summary

Workorder: 419050

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Q											
Q											
R											
R											
U											
UI											
UJ											
UL											
X											
Y											
Z											
^											
d											
e											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26297**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: March 20, 2017 13:35
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAFGD01TDS

FGD-01

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.83	0.50	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011)	5.26	0.00	S.U.	3/23/17 14:53	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	31	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26298**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: March 20, 2017 14:35
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAG01TDS

MW 1

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.77	0.50	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.50	0.00	S.U.	3/23/17 14:53	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	26	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26300**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: March 21, 2017 08:25
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	17.12	0.50	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.50	0.00	S.U.	3/23/17 14:53	BF
Sulfates by IC EPA 300.0	106	2.5	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	362	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26302**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: March 21, 2017 09:25
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.2	0.50	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011)	5.40	0.00	S.U.	3/23/17 14:53	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	258	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



Central Laboratory (P-08)
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26304**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: March 21, 2017 12:05
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP101TDS

AP1-01

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	164	2.5	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.64	0.00	S.U.	3/23/17 14:53	BF
Sulfates by IC EPA 300.0	5.52	2.5	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	441	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26307**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: March 21, 2017 13:04
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP104TDS

AP1-04

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	9.16	0.50	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.54	0.00	S.U.	3/23/17 14:53	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	362	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26308**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: March 21, 2017 13:45
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP102TDS

AP1-02

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	125.2	2.5	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.50	0.00	S.U.	3/23/17 14:53	BF
Sulfates by IC EPA 300.0	28.9	2.5	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	420	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26310**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: March 21, 2017 14:47
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP103TDS

AP1-03

Login Record File: 170322002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	29.1	2.5	mg/L	3/24/17 06:18	EB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.62	0.00	S.U.	3/23/17 14:53	BF
Sulfates by IC EPA 300.0	72.9	2.5	mg/L	3/24/17 06:18	EB
Total Dissolved Solid-SM2540C	392	2.0	mg/L	3/24/17 15:00	BF

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

Approved By: _____



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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26324**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: March 20, 2017 13:35
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Barium by ICP-OES 200.7	82.3	10.0	ppb	3/24/17 12:00	MC
Beryllium EPA 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Boron - EPA 200.7	Less than	1000	ppb	3/24/17 12:00	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	832	100	ppb	3/24/17 12:00	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	1.2	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	1.1	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	2.2	2.0	ppb	3/24/17 12:00	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26325**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: March 20, 2017 14:35
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAG01TM

MW 1

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Barium by ICP-OES 200.7	56.0	10.0	ppb	3/24/17 12:00	MC
Beryllium EPA 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Boron - EPA 200.7	Less than	1000	ppb	3/24/17 12:00	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	1510	100	ppb	3/24/17 12:00	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	1.6	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26327**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: March 21, 2017 08:25
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	5.6	1.0	ppb	3/28/17 14:19	MC
Barium by ICP-OES 200.7	147	10.0	ppb	3/24/17 12:00	MC
Beryllium EPA 200.7	3.7	2.0	ppb	3/24/17 12:00	MC
Boron - EPA 200.7	Less than	1000	ppb	3/24/17 12:00	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	20600	100	ppb	3/24/17 12:00	MC
Chromium by ICP_MS 200.8	1.2	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	14.2	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	11.0	2.0	ppb	3/24/17 12:00	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	16.5	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26329**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: March 21, 2017 09:25
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	1.2	1.0	ppb	3/28/17 14:19	MC
Barium by ICP-OES 200.7	201	10.0	ppb	3/24/17 12:00	MC
Beryllium EPA 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Boron - EPA 200.7	Less than	1000	ppb	3/24/17 12:00	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	12500	100	ppb	3/24/17 12:00	MC
Chromium by ICP_MS 200.8	1.2	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26331**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: March 21, 2017 12:05
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP101TM

AP1-01

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Barium by ICP-OES 200.7	218	10.0	ppb	3/24/17 12:00	MC
Beryllium EPA 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Boron - EPA 200.7	1480	1000	ppb	3/24/17 12:00	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	53600	100	ppb	3/24/17 12:00	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	5.1	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26334**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: March 21, 2017 13:04
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP104TM

AP1-04

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	81.4	5.0	ppb	4/7/17 12:10	MC
Barium by ICP-OES 200.7	194	10.0	ppb	3/24/17 12:00	MC
Beryllium EPA 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Boron - EPA 200.7	1440	1000	ppb	3/24/17 12:00	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	92100	100	ppb	3/24/17 12:00	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26335**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: March 21, 2017 13:45
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP102TM

AP1-02

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	298	25.0	ppb	4/7/17 12:10	MC
Barium by ICP-OES 200.7	194	10.0	ppb	3/24/17 12:00	MC
Beryllium EPA 200.7	Less than	2.0	ppb	3/24/17 12:00	MC
Boron - EPA 200.7	1340	1000	ppb	3/24/17 12:00	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	61100	100	ppb	3/24/17 12:00	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	36.0	2.0	ppb	3/24/17 12:00	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	25.2	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB26337**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: March 21, 2017 14:47
 Date & Time Submitted: March 22, 2017 13:30
 Collected by: A.HILL Location Code: WAAP103TM

AP1-03

Login Record File: 170323001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Arsenic by ICP_MS 200.8	1400	100	ppb	4/7/17 12:10	MC
Barium by ICP-OES 200.7	150	10.0	ppb	3/24/17 12:29	MC
Beryllium EPA 200.7	Less than	2.0	ppb	3/24/17 12:29	MC
Boron - EPA 200.7	1000	1000	ppb	3/24/17 12:29	MC
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Calcium EPA 200.7	72500	100	ppb	3/24/17 12:29	MC
Chromium by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lead by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC
Lithium (CWA) 200.7	84.9	2.0	ppb	3/24/17 12:29	MC
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	3/24/17 14:55	PRC
Molybdenum - EPA 200.8	16.4	1.0	ppb	3/28/17 14:19	MC
Selenium by ICP-MS 200.8	Less than	5.0	ppb	3/28/17 14:19	MC
Thallium by ICP-MS 200.8	Less than	1.0	ppb	3/28/17 14:19	MC

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 05/22/2017

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		4.980	4.330
Field Sp. Conductivity micromhos/cm		68.000	54.000
Field Turbidity NTU		2.70	3.60
ORP mV		198.800	289.100
Oxygen, dissolved mg/L		4.950	2.890
Temp (Celcius) degrees C		22.100	18.610
Water level elevation ft		114.91	116.15

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 05/22/2017

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-05	MW-AP-08
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		5.890	5.690
Field Sp. Conductivity micromhos/cm		503.000	555.000
Field Turbidity NTU		6.90	6.80
ORP mV		-63.900	-44.100
Oxygen, dissolved mg/L		0.530	0.400
Temp (Celcius) degrees C		18.410	18.730
Water level elevation ft		86.66	86.78

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 05/23/2017

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04
NAME	Lab. Certificate No.	32006	32006	32006	32006
Field pH S.U.		6.550	6.110	6.570	5.980
Field Sp. Conductivity micromhos/cm		779.000	592.000	662.000	766.000
Field Turbidity NTU		1.80	9.80	2.50	9.10
ORP mV		-104.200	-23.000	-87.100	-66.800
Oxygen, dissolved mg/L		1.140	1.390	1.720	0.580
Temp (Celcius) degrees C		20.580	20.300	19.360	17.270
Water level elevation ft		90.17	87.78	88.20	87.36

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 424121 GEL Work Order: 424121

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.

Reviewed by _____



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-01	Project: SCEG01716c
Sample ID: 424121001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 23-MAY-17 15:15	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.351	0.033	0.100	mg/L		1	MXL2	06/03/17	0312	1669572	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	05/30/17	1303	1668715	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.94	3.00	pCi/L			BXF1	06/19/17	1529	1668804	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.761	0.308	1.00	pCi/L			MXH8	06/21/17	0900	1668815	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0851	1668714

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.7	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-02	Project: SCEG01716c
Sample ID: 424121002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 23-MAY-17 16:55	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.269	0.033	0.100	mg/L		1	MXL2	06/03/17	0439	1669572	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	9.79	2.00	10.0	ug/L	1.00	1	BAJ	05/30/17	1316	1668715	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.29	3.00	pCi/L			BXF1	06/19/17	1529	1668804	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.517	0.220	1.00	pCi/L			MXH8	06/21/17	0900	1668815	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0851	1668714

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.5	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-03	Project: SCEG01716c
Sample ID: 424121003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 23-MAY-17 18:50	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.715	0.033	0.100	mg/L		1	MXL2	06/03/17	0507	1669572	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		101	2.00	10.0	ug/L	1.00	1	BAJ	05/30/17	1319	1668715	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.16	3.00	pCi/L			BXF1	06/19/17	1529	1668804	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.57	0.158	1.00	pCi/L			MXH8	06/21/17	0930	1668815	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0851	1668714

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.1	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: June 21, 2017

Page 1 of 3

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 424121

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1669572										
QC1203800284		424121003	DUP								
Fluoride		0.715		0.720	mg/L	0.613		(0%-20%)	MXL2	06/03/17	05:36
QC1203800283		LCS									
Fluoride	2.50			2.34	mg/L		93.5	(90%-110%)		06/02/17	23:20
QC1203800282		MB									
Fluoride			U	ND	mg/L					06/02/17	22:52
QC1203800285		424121003	PS								
Fluoride	2.50	0.715		3.13	mg/L		96.7	(90%-110%)		06/03/17	06:05
Metals Analysis - ICPMS											
Batch	1668715										
QC1203798184		424121001	DUP								
Lithium			U	ND	U	ND	ug/L	N/A		BAJ	05/30/17 13:07
QC1203798183		LCS									
Lithium	50.0			53.9	ug/L		108	(80%-120%)		05/30/17	13:00
QC1203798182		MB									
Lithium			U	ND	ug/L					05/30/17	12:57
QC1203798185		424121001	MS								
Lithium	50.0	U	ND	50.7	ug/L		101	(75%-125%)		05/30/17	13:10
QC1203798186		424121001	SDILT								
Lithium			U	ND	U	ND	ug/L	N/A		(0%-10%)	05/30/17 13:13

GEL LABORATORIES LLC

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

QC Summary

Workorder: 424121

Page 2 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	1668804										
QC1203798409	424115006	DUP									
Radium-228		U	0.561	U	0.390	pCi/L	N/A		N/A	BXF1	06/19/17 16:50
QC1203798410	LCS										
Radium-228	20.2				19.0	pCi/L	94.1	(75%-125%)			06/19/17 15:33
QC1203798408	MB										
Radium-228			U		0.546	pCi/L					06/19/17 15:29
Rad Ra-226											
Batch	1668815										
QC1203798449	424115006	DUP									
Radium-226			0.630		0.725	pCi/L	14.1	(0% - 100%)	MXH8		06/21/17 09:30
QC1203798451	LCS										
Radium-226	26.0				20.0	pCi/L	77.2	(75%-125%)			06/21/17 09:30
QC1203798448	MB										
Radium-226			U		0.0822	pCi/L					06/21/17 09:30
QC1203798450	424115006	MS									
Radium-226	130		0.630		120	pCi/L	91.8	(75%-125%)			06/21/17 09:30

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies

GEL LABORATORIES LLC

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QC Summary

Workorder: 424121

Page 3 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
H		Analytical holding time was exceeded									
J		Value is estimated									
K		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		M if above MDC and less than LLD									
M		REMP Result > MDC/CL and < RDL									
N		Metals--The Matrix spike sample recovery is not within specified control limits									
N/A		RPD or %Recovery limits do not apply.									
NI		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		Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.									
R		Sample results are rejected									
U		Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.									
UI		Gamma Spectroscopy--Uncertain identification									
UJ		Gamma Spectroscopy--Uncertain identification									
UL		Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.									
X		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.									
Z		Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.									
^		RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.									
d		5-day BOD--The 2:1 depletion requirement was not met for this sample									
e		5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes									
h		Preparation or preservation holding time was exceeded									

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 424119 GEL Work Order: 424119

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.

Reviewed by _____



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FGD-01	Project: SCEG01716c
Sample ID: 424119001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 22-MAY-17 12:30	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	06/05/17	1622	1669569	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	05/27/17	1802	1668713	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.32	3.00	pCi/L			BXF1	06/21/17	1113	1668805	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.572	0.284	1.00	pCi/L			MXH8	06/20/17	0925	1668820	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0852	1668711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			86.3	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-1A	Project: SCEG01716c
Sample ID: 424119002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 22-MAY-17 13:00	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	06/05/17	1748	1669569	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	05/27/17	1805	1668713	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.54	3.00	pCi/L			BXF1	06/21/17	1113	1668805	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.314	1.00	pCi/L			MXH8	06/20/17	0925	1668820	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0852	1668711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			89.6	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FB-01	Project: SCEG01716c
Sample ID: 424119003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 22-MAY-17 13:05	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MAR1	06/05/17	1817	1669569	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	05/27/17	1809	1668713	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.37	3.00	pCi/L			BXF1	06/21/17	1113	1668805	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.813	0.316	1.00	pCi/L			MXH8	06/20/17	0925	1668820	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0852	1668711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-99	Project: SCEG01716c
Sample ID: 424119004	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 22-MAY-17 15:55	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.421	0.033	0.100	mg/L		1	MAR1	06/05/17	1846	1669569	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		14.7	2.00	10.0	ug/L	1.00	1	BAJ	05/27/17	1812	1668713	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.59	1.27	3.00	pCi/L			BXF1	06/21/17	1113	1668805	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.805	0.143	1.00	pCi/L			MXH8	06/20/17	0925	1668820	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0852	1668711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			100	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-08	Project: SCEG01716c
Sample ID: 424119005	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 22-MAY-17 16:05	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.412	0.033	0.100	mg/L		1	MAR1	06/05/17	1915	1669569	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		14.4	2.00	10.0	ug/L	1.00	1	BAJ	05/27/17	1815	1668713	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.41	3.00	pCi/L			BXF1	06/21/17	1234	1668805	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.31	0.243	1.00	pCi/L			MXH8	06/20/17	0925	1668820	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0852	1668711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			98.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: AP1-05 Project: SCEG01716c
Sample ID: 424119006 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 22-MAY-17 17:15
Receive Date: 25-MAY-17
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0624	0.033	0.100	mg/L		1	MAR1	06/05/17	1944	1669569	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	05/27/17	1825	1668713	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.21	3.00	pCi/L			BXF1	06/21/17	1114	1668805	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226	U	ND	0.315	1.00	pCi/L			MXH8	06/20/17	0955	1668820	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0852	1668711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			96	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: June 21, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-04	Project: SCEG01716c
Sample ID: 424119007	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 23-MAY-17 08:00	
Receive Date: 25-MAY-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.195	0.033	0.100	mg/L		1	MAR1	06/05/17	2111	1669569	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	05/27/17	1828	1668713	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.67	1.16	3.00	pCi/L			BXF1	06/21/17	1114	1668805	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.950	0.190	1.00	pCi/L			MXH8	06/20/17	0955	1668820	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	05/26/17	0852	1668711

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: June 21, 2017

Page 1 of 4

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 424119

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1669569										
QC1203800278	424119001	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		MAR1	06/05/17	16:51
QC1203800279	424119011	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A			06/05/17	23:35
QC1203800277	LCS										
Fluoride	2.50				2.66	mg/L	106	(90%-110%)		06/05/17	15:53
QC1203800276	MB										
Fluoride			U		ND	mg/L				06/05/17	15:24
QC1203800280	424119001	PS									
Fluoride	2.50	U	ND		2.63	mg/L	105	(90%-110%)		06/05/17	17:19
QC1203800281	424119011	PS									
Fluoride	2.50	U	ND		2.71	mg/L	107	(90%-110%)		06/06/17	00:04
Metals Analysis - ICPMS											
Batch	1668713										
QC1203798168	424115001	DUP									
Lithium			12.4		12.2	ug/L	0.919 ^	(+/-10.0)	BAJ	05/27/17	17:12
QC1203798169	424115002	DUP									
Lithium		J	8.90	J	9.32	ug/L	4.65 ^	(+/-10.0)		05/27/17	17:31
QC1203798167	LCS										
Lithium	50.0				52.4	ug/L	105	(80%-120%)		05/27/17	17:05
QC1203798166	MB										
Lithium			U		ND	ug/L				05/27/17	17:02

GEL LABORATORIES LLC

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QC Summary

Workorder: 424119

Page 2 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1668713										
QC1203798170	424115001	MS									
Lithium	50.0	12.4		61.0	ug/L		97.3	(75%-125%)	BAJ	05/27/17	17:15
QC1203798171	424115002	MS									
Lithium	50.0	J	8.90	59.6	ug/L		101	(75%-125%)		05/27/17	17:34
QC1203798172	424115001	SDILT									
Lithium		12.4	J	2.45	ug/L	.777		(0%-10%)		05/27/17	17:18
QC1203798173	424115002	SDILT									
Lithium		J	8.90	U	ND	ug/L	N/A	(0%-10%)		05/27/17	17:37
Rad Gas Flow											
Batch	1668805										
QC1203798412	424119008	DUP									
Radium-228		U	0.638	U	0.561	pCi/L	N/A		N/A	BXF1	06/21/17 11:18
QC1203798413	LCS										
Radium-228	20.2			18.8	pCi/L		93.1	(75%-125%)		06/21/17	11:18
QC1203798411	MB										
Radium-228		U	-0.0329		pCi/L					06/21/17	11:18
Rad Ra-226											
Batch	1668820										
QC1203798460	424119006	DUP									
Radium-226		U	0.227	U	0.347	pCi/L	N/A		N/AMXH8	06/20/17	10:26
QC1203798462	LCS										
Radium-226	26.0			23.2	pCi/L		89.5	(75%-125%)		06/20/17	10:26
QC1203798459	MB										
Radium-226		U	-0.0475		pCi/L					06/20/17	09:55

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QC Summary

Workorder: 424119

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Ra-226											
Batch		1668820									
QC1203798461	424119006	MS									
Radium-226	130	U	0.227	110	pCi/L		84.5	(75%-125%)	MXH8	06/20/17	10:26

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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 Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification
- UJ Gamma Spectroscopy--Uncertain identification
- UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

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QC Summary

Workorder: 424119

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Y											
Z											
^											
d											
e											
h											

Y Other specific qualifiers were required to properly define the results. Consult case narrative.

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27171**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: May 22, 2017 12:30
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAFGD01TDS

FGD-01

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.77	0.50	mg/L	5/25/17 16:23	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.87	0.00	S.U.	5/24/17 09:30	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	5/25/17 16:23	BB
Total Dissolved Solid-SM2540C	35	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



Central Laboratory (P-08)
 2102 North Lake Drive
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27172**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: May 22, 2017 13:00
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAG01TDS

MW 1

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.60	0.50	mg/L	5/25/17 16:23	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.65	0.00	S.U.	5/24/17 09:30	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	5/25/17 16:23	BB
Total Dissolved Solid-SM2540C	32	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27175**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: May 22, 2017 16:05
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	15.8	1.0	mg/L	5/25/17 16:23	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.93	0.00	S.U.	5/24/17 09:30	BF
Sulfates by IC EPA 300.0	135	1.0	mg/L	5/25/17 16:23	BB
Total Dissolved Solid-SM2540C	377	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27176**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: May 22, 2017 17:15
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	17.9	0.50	mg/L	5/25/17 16:23	BB
pH by SM4500HB(2011)	6.17	0.00	S.U.	5/24/17 09:30	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	5/25/17 16:23	BB
Total Dissolved Solid-SM2540C	283	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27177**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: May 23, 2017 08:00
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAAP104TDS

AP1-04

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	10.2	0.50	mg/L	5/25/17 16:23	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.43	0.00	S.U.	5/24/17 09:30	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	5/25/17 16:23	BB
Total Dissolved Solid-SM2540C	432	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27228**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: May 23, 2017 15:15
 Date & Time Submitted: May 24, 2017 09:11
 Collected by: S.SANSBURY Location Code: WAAP101TDS

AP1-01

Login Record File: 170524005

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	168	2.5	mg/L	5/25/17 16:31	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.73	0.00	S.U.	5/24/17 09:30	BF
Sulfates by IC EPA 300.0	3.7	2.5	mg/L	5/25/17 16:31	BB
Total Dissolved Solid-SM2540C	433	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27229**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: May 23, 2017 16:55
 Date & Time Submitted: May 24, 2017 09:11
 Collected by: S.SANSBURY Location Code: WAAP102TDS

AP1-02

Login Record File: 170524005

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	91.1	2.5	mg/L	5/25/17 16:31	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.27	0.00	S.U.	5/24/17 09:30	BF
Sulfates by IC EPA 300.0	23.5	2.5	mg/L	5/25/17 16:31	BB
Total Dissolved Solid-SM2540C	341	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27230**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: May 23, 2017 18:50
 Date & Time Submitted: May 24, 2017 09:11
 Collected by: S.SANSBURY Location Code: WAAP103TDS

AP1-03

Login Record File: 170524005

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	74.3	0.50	mg/L	5/25/17 16:31	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.62	0.00	S.U.	5/24/17 09:30	BF
Sulfates by IC EPA 300.0	90.9	0.50	mg/L	5/25/17 16:31	BB
Total Dissolved Solid-SM2540C	405	2.0	mg/L	5/25/17 14:00	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27182**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: May 22, 2017 12:30
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Barium by ICP-OES 200.7	66.0	10.0	ppb	5/25/17 11:45	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	5/25/17 11:45	CDB
Boron - EPA 200.7	Less than	1000	ppb	5/25/17 11:45	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Calcium EPA 200.7	669	100	ppb	5/25/17 11:45	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Lead by ICP-MS 200.8	1.64	1.0	ppb	5/25/17 17:00	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	5/25/17 11:45	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/30/17 15:56	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	5/30/17 14:33	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	5/25/17 17:00	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27183**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: May 22, 2017 13:00
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAG01TM

MW 1

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Barium by ICP-OES 200.7	53.2	10.0	ppb	5/25/17 10:39	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	5/25/17 10:39	CDB
Boron - EPA 200.7	Less than	1000	ppb	5/25/17 10:39	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Calcium EPA 200.7	677	100	ppb	5/25/17 10:39	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Lead by ICP-MS 200.8	1.11	1.0	ppb	5/25/17 17:00	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	5/25/17 10:39	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/30/17 15:56	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	5/30/17 14:33	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	5/25/17 17:00	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27186**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: May 22, 2017 16:05
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Arsenic by ICP_MS 200.8	7.6	1.0	ppb	5/25/17 17:00	CDB
Barium by ICP-OES 200.7	136	10.0	ppb	5/30/17 08:56	CDB
Beryllium EPA 200.7	3.6	2.0	ppb	5/30/17 08:56	CDB
Boron - EPA 200.7	Less than	1000	ppb	5/30/17 08:56	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Calcium EPA 200.7	23290	1000	ppb	5/30/17 08:56	CDB
Chromium by ICP_MS 200.8	1.01	1.0	ppb	5/25/17 17:00	CDB
Cobalt by ICP_MS 200.8	19.8	1.0	ppb	5/25/17 17:00	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Lithium (CWA) 200.7	12.3	2.0	ppb	5/30/17 08:56	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/30/17 15:56	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	5/30/17 14:33	CDB
Selenium by ICP-MS 200.8	31.9	5.0	ppb	5/25/17 17:00	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27187**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: May 22, 2017 17:15
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Arsenic by ICP_MS 200.8	1.4	1.0	ppb	5/25/17 17:00	CDB
Barium by ICP-OES 200.7	199	10.0	ppb	5/30/17 08:56	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	5/30/17 08:56	CDB
Boron - EPA 200.7	Less than	1000	ppb	5/30/17 08:56	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Calcium EPA 200.7	12200	1000	ppb	5/30/17 08:56	CDB
Chromium by ICP_MS 200.8	1.01	1.0	ppb	5/25/17 17:00	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	5/30/17 08:56	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/30/17 15:56	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	5/30/17 14:33	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	5/25/17 17:00	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27188**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: May 23, 2017 08:00
 Date & Time Submitted: May 23, 2017 15:55
 Collected by: A.HILL Location Code: WAAP104TM

AP1-04

Login Record File: 170524001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Arsenic by ICP_MS 200.8	66.8	1.0	ppb	5/25/17 17:00	CDB
Barium by ICP-OES 200.7	234	10.0	ppb	5/30/17 08:56	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	5/30/17 08:56	CDB
Boron - EPA 200.7	1481	1000	ppb	5/30/17 08:56	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Calcium EPA 200.7	94790	1000	ppb	5/30/17 08:56	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	5/30/17 08:56	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/30/17 15:56	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	5/30/17 14:33	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	5/25/17 17:00	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:00	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27231**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: May 23, 2017 15:15
 Date & Time Submitted: May 24, 2017 09:11
 Collected by: S.SANSBURY Location Code: WAAP101TM

AP1-01

Login Record File: 170524005

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:20	CDB
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:20	CDB
Barium by ICP-OES 200.7	236	10.0	ppb	5/25/17 16:28	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	5/25/17 16:28	CDB
Boron - EPA 200.7	1422	1000	ppb	5/25/17 16:28	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/25/17 17:20	CDB
Calcium EPA 200.7	57180	1000	ppb	5/25/17 16:28	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:20	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	5/25/17 17:20	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:20	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	5/25/17 16:28	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/30/17 15:56	PRC
Molybdenum - EPA 200.8	4.4	1.0	ppb	5/30/17 14:35	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	5/25/17 17:20	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/25/17 17:20	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27232**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: May 23, 2017 16:55
 Date & Time Submitted: May 24, 2017 09:11
 Collected by: S.SANSBURY Location Code: WAAP102TM

AP1-02

Login Record File: 170524005

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Arsenic by ICP_MS 200.8	39.4	1.0	ppb	5/26/17 14:29	CDB
Barium by ICP-OES 200.7	184	10.0	ppb	5/25/17 16:28	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	5/25/17 16:28	CDB
Boron - EPA 200.7	Less than	1000	ppb	5/25/17 16:28	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Calcium EPA 200.7	53230	1000	ppb	5/25/17 16:28	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Lithium (CWA) 200.7	8.6	2.0	ppb	5/25/17 16:28	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	5/30/17 15:56	PRC
Molybdenum - EPA 200.8	5.2	1.0	ppb	5/30/17 14:35	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	5/26/17 14:29	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27233**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: May 23, 2017 18:50
 Date & Time Submitted: May 24, 2017 09:11
 Collected by: S.SANSBURY Location Code: WAAP103TM

AP1-03

Login Record File: 170524005

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Arsenic by ICP_MS 200.8	1809	25.0	ppb	5/31/17 15:43	CDB
Barium by ICP-OES 200.7	182	10.0	ppb	5/25/17 16:14	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	5/25/17 16:14	CDB
Boron - EPA 200.7	1035	1000	ppb	5/25/17 16:14	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Calcium EPA 200.7	79390	1000	ppb	5/25/17 16:14	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB
Lithium (CWA) 200.7	90.1	2.0	ppb	5/25/17 16:14	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	6/2/17 15:56	PRC
Molybdenum - EPA 200.8	19.6	1.0	ppb	5/30/17 14:35	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	5/26/17 14:29	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	5/26/17 14:29	CDB

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 07/06/2017

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-05	MW-AP-08
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.		5.990	5.580
Field Sp. Conductivity micromhos/cm		448.000	511.000
Field Turbidity NTU		8.10	6.90
ORP mV		-18.900	8.600
Oxygen, dissolved mg/L		0.560	0.640
Temp (Celcius) degrees C		19.220	19.110
Water level elevation ft		86.93	86.97

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 07/10/2017

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A
NAME	Lab. Certificate No.	32006
Field pH S.U.		4.320
Field Sp. Conductivity micromhos/cm		53.000
Field Turbidity NTU		1.50
ORP mV		225.400
Oxygen, dissolved mg/L		3.640
Temp (Celcius) degrees C		21.610
Water level elevation ft		114.44

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 07/10/2017

Time Sampled: 12:00:00PM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04
NAME	Lab. Certificate No.	32006	32006	32006	32006
Field pH S.U.		6.250	5.990	6.100	6.260
Field Sp. Conductivity micromhos/cm		782.000	595.000	657.000	807.000
Field Turbidity NTU		6.82	2.97	4.32	6.23
ORP mV		-73.600	-59.300	-70.500	-89.700
Oxygen, dissolved mg/L		0.330	0.620	0.250	0.300
Temp (Celcius) degrees C		23.370	25.440	22.480	24.080
Water level elevation ft		89.23	87.41	87.71	87.17

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 07/24/2017

Time Sampled: 12:00:00PM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A	MW-FGD-01
NAME	Lab. Certificate No.	32006	32006
Field pH S.U.			4.470
Field Sp. Conductivity micromhos/cm			66.000
Field Turbidity NTU			4.70
ORP mV			316.600
Oxygen, dissolved mg/L			3.480
Temp (Celsius) degrees C			17.320
Water level elevation ft		114.87	116.15

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 427697 GEL Work Order: 427697

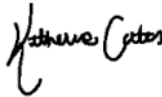
The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- H Analytical holding time was exceeded
- J Value is estimated
- 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.



Reviewed by _____

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-01A	Project: SCEG01716c
Sample ID: 427697001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 10-JUL-17 09:15	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0398	0.033	0.100	mg/L		1	MXL2	07/17/17	1757	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1834	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.85	1.27	3.00	pCi/L			JXC9	07/19/17	1301	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.63	0.274	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			104	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-01	Project: SCEG01716c
Sample ID: 427697002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 10-JUL-17 10:55	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.340	0.033	0.100	mg/L		1	MXL2	07/17/17	1923	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1853	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.07	3.00	pCi/L			JXC9	07/19/17	1301	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		2.36	0.290	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			99.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-02	Project: SCEG01716c
Sample ID: 427697003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 10-JUL-17 12:30	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.199	0.033	0.100	mg/L		1	MXL2	07/17/17	1952	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	6.46	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1906	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	0.968	3.00	pCi/L			JXC9	07/19/17	1301	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.943	0.476	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			98	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-03	Project: SCEG01716c
Sample ID: 427697004	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 10-JUL-17 14:20	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.518	0.033	0.100	mg/L		1	MXL2	07/17/17	2021	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		61.6	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1909	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.44	3.00	pCi/L			JXC9	07/19/17	1301	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.98	0.426	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			84.8	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-04	Project: SCEG01716c
Sample ID: 427697005	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 10-JUL-17 16:20	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.188	0.033	0.100	mg/L		1	MXL2	07/17/17	2050	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1919	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.52	3.00	pCi/L			JXC9	07/19/17	1301	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.88	0.277	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			90.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: July 26, 2017

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GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 427697

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1682878										
QC1203832289	427697001	DUP									
Fluoride		J	0.0398	J	0.0386	mg/L	3.06 ^	(+/-0.100)	MXL2	07/17/17	18:25
QC1203832288	LCS										
Fluoride	2.50				2.36	mg/L		94.2	(90%-110%)	07/17/17	17:28
QC1203832287	MB										
Fluoride				U	ND	mg/L				07/17/17	16:59
QC1203832290	427697001	PS									
Fluoride	2.50	J	0.0398		2.40	mg/L		94.4	(90%-110%)	07/17/17	18:54
Metals Analysis - ICPMS											
Batch	1681837										
QC1203829734	427697001	DUP									
Lithium		U	ND	U	ND	ug/L	N/A			BAJ	07/14/17 18:38
QC1203829735	427697002	DUP									
Lithium		U	ND	U	ND	ug/L	N/A				07/14/17 18:57
QC1203829733	LCS										
Lithium	50.0				51.0	ug/L		102	(80%-120%)	07/14/17	18:31
QC1203829732	MB										
Lithium				U	ND	ug/L				07/14/17	18:28
QC1203829736	427697001	MS									
Lithium	50.0	U	ND		52.1	ug/L		101	(75%-125%)	07/14/17	18:41
QC1203829737	427697002	MS									
Lithium	50.0	U	ND		46.7	ug/L		93.1	(75%-125%)	07/14/17	19:00

GEL LABORATORIES LLC

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

QC Summary

Workorder: 427697

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch 1681837											
QC1203829738	427697001	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)	BAJ	07/14/17	18:44
QC1203829739	427697002	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		07/14/17	19:03
Rad Gas Flow											
Batch 1682124											
QC1203830399	427818004	DUP									
Radium-228		U	0.486	U	0.715	pCi/L	N/A	N/A	JXC9	07/19/17	13:07
QC1203830402	LCS										
Radium-228	20.0				18.9	pCi/L	94.4	(75%-125%)		07/19/17	13:07
QC1203830398	MB										
Radium-228			U		-0.157	pCi/L				07/19/17	13:07
QC1203830400	427818004	MS									
Radium-228	60.0	U	0.486		52.6	pCi/L	87.7	(75%-125%)		07/19/17	13:07
QC1203830401	427818004	MSD									
Radium-228	60.0	U	0.486		59.9	pCi/L	12.9	99.7	(0%-20%)	07/19/17	13:07
Rad Ra-226											
Batch 1682145											
QC1203830453	427818006	DUP									
Radium-226			0.837		0.585	pCi/L	35.5	(0% - 100%)	MXH8	07/19/17	09:35
QC1203830456	LCS										
Radium-226	26.0				23.3	pCi/L	89.6	(75%-125%)		07/19/17	09:35
QC1203830452	MB										
Radium-226			U		0.104	pCi/L				07/19/17	09:35

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QC Summary

Workorder: 427697

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Ra-226											
Batch	1682145										
QC1203830454	427818006	MS									
Radium-226	130	0.837		119	pCi/L		90.8	(75%-125%)	MXH8	07/19/17	09:35
QC1203830455	427818006	MSD									
Radium-226	130	0.837		105	pCi/L	11.9	80.6	(0%-20%)		07/20/17	04:15

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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 Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

GEL LABORATORIES LLC

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QC Summary

Workorder: 427697

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UJ											
UL											
X											
Y											
Z											
^											
d											
e											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.

GEL LABORATORIES LLC

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

**Certificate of Analysis Report
for**

GEEL003 GEL Engineering, LLC

Client SDG: 427698 GEL Work Order: 427698

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.



Reviewed by _____

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FB-01	Project: SCEG01716c
Sample ID: 427698001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 06-JUL-17 15:50	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	U	ND	0.033	0.100	mg/L		1	MXL2	07/17/17	2119	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1922	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.48	3.00	pCi/L			JXC9	07/19/17	1301	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		0.636	0.212	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			94.2	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-8	Project: SCEG01716c
Sample ID: 427698002	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 06-JUL-17 16:30	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.304	0.033	0.100	mg/L		1	MXL2	07/17/17	2246	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		10.3	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1925	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.26	3.00	pCi/L			JXC9	07/19/17	1301	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		17.6	0.396	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			101	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: MW-99	Project: SCEG01716c
Sample ID: 427698003	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 06-JUL-17 16:40	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.304	0.033	0.100	mg/L		1	MXL2	07/17/17	2315	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium		11.0	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1928	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228		1.79	1.54	3.00	pCi/L			JXC9	07/19/17	1302	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.74	0.352	1.00	pCi/L			MXH8	07/19/17	0830	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			98.6	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: July 26, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: AP1-05	Project: SCEG01716c
Sample ID: 427698004	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 06-JUL-17 17:50	
Receive Date: 12-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0835	0.033	0.100	mg/L		1	MXL2	07/17/17	2344	1682878	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	U	ND	2.00	10.0	ug/L	1.00	1	BAJ	07/14/17	1932	1681837	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.08	3.00	pCi/L			JXC9	07/19/17	1302	1682124	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.03	0.416	1.00	pCi/L			MXH8	07/19/17	0905	1682145	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	SXW1	07/13/17	0714	1681836

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			93.1	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: July 26, 2017

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GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 427698

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1682878										
QC1203832289	427697001	DUP									
Fluoride		J	0.0398	J	0.0386	mg/L	3.06 ^	(+/-0.100)	MXL2	07/17/17	18:25
QC1203832288	LCS										
Fluoride	2.50				2.36	mg/L		94.2	(90%-110%)	07/17/17	17:28
QC1203832287	MB										
Fluoride				U	ND	mg/L				07/17/17	16:59
QC1203832290	427697001	PS									
Fluoride	2.50	J	0.0398		2.40	mg/L		94.4	(90%-110%)	07/17/17	18:54
Metals Analysis - ICPMS											
Batch	1681837										
QC1203829734	427697001	DUP									
Lithium		U	ND	U	ND	ug/L	N/A			BAJ	07/14/17 18:38
QC1203829735	427697002	DUP									
Lithium		U	ND	U	ND	ug/L	N/A				07/14/17 18:57
QC1203829733	LCS										
Lithium	50.0				51.0	ug/L		102	(80%-120%)	07/14/17	18:31
QC1203829732	MB										
Lithium				U	ND	ug/L				07/14/17	18:28
QC1203829736	427697001	MS									
Lithium	50.0	U	ND		52.1	ug/L		101	(75%-125%)	07/14/17	18:41
QC1203829737	427697002	MS									
Lithium	50.0	U	ND		46.7	ug/L		93.1	(75%-125%)	07/14/17	19:00

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QC Summary

Workorder: 427698

Page 2 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1681837										
QC1203829738	427697001	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)	BAJ	07/14/17	18:44
QC1203829739	427697002	SDILT									
Lithium		U	ND	U	ND	ug/L	N/A	(0%-10%)		07/14/17	19:03
Rad Gas Flow											
Batch	1682124										
QC1203830399	427818004	DUP									
Radium-228		U	0.486	U	0.715	pCi/L	N/A	N/A	JXC9	07/19/17	13:07
QC1203830402	LCS										
Radium-228	20.0				18.9	pCi/L	94.4	(75%-125%)		07/19/17	13:07
QC1203830398	MB										
Radium-228			U		-0.157	pCi/L				07/19/17	13:07
QC1203830400	427818004	MS									
Radium-228	60.0	U	0.486		52.6	pCi/L	87.7	(75%-125%)		07/19/17	13:07
QC1203830401	427818004	MSD									
Radium-228	60.0	U	0.486		59.9	pCi/L	12.9	99.7	(0%-20%)	07/19/17	13:07
Rad Ra-226											
Batch	1682145										
QC1203830453	427818006	DUP									
Radium-226			0.837		0.585	pCi/L	35.5	(0% - 100%)	MXH8	07/19/17	09:35
QC1203830456	LCS										
Radium-226	26.0				23.3	pCi/L	89.6	(75%-125%)		07/19/17	09:35
QC1203830452	MB										
Radium-226			U		0.104	pCi/L				07/19/17	09:35

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QC Summary

Workorder: 427698

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Ra-226											
Batch		1682145									
QC1203830454	427818006	MS									
Radium-226	130	0.837		119	pCi/L		90.8	(75%-125%)	MXH8	07/19/17	09:35
QC1203830455	427818006	MSD									
Radium-226	130	0.837		105	pCi/L	11.9	80.6	(0%-20%)		07/20/17	04:15

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
- B The target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- E %difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- FA Failed analysis.
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- K 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 M if above MDC and less than LLD
- M REMP Result > MDC/CL and < RDL
- N Metals--The Matrix spike sample recovery is not within specified control limits
- 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 Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes.
- R Sample results are rejected
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.
- UI Gamma Spectroscopy--Uncertain identification

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QC Summary

Workorder: 427698

Page 4 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
UJ											
UL											
X											
Y											
Z											
^											
d											
e											
h											

UJ Gamma Spectroscopy--Uncertain identification

UL Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.

X 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.

Z Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

d 5-day BOD--The 2:1 depletion requirement was not met for this sample

e 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes

h Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.

GEL LABORATORIES LLC

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Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 428960 GEL Work Order: 428960

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
- H Analytical holding time was exceeded
- J Value is estimated
- 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.



Reviewed by _____

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: August 22, 2017

Company : GEL Engineering, LLC
 Address : 2040 Savage Rd

 Charleston, South Carolina 29417
 Contact: Robert Gardner
 Project: Wateree CCR

Client Sample ID: FGD-01	Project: SCEG01716c
Sample ID: 428960001	Client ID: GEEL003
Matrix: Ground Water	
Collect Date: 24-JUL-17 14:10	
Receive Date: 27-JUL-17	
Collector: Client	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride	J	0.0358	0.033	0.100	mg/L		1	MXL2	07/29/17	0505	1686433	1
Metals Analysis-ICP-MS												
200.8/200.2 NPDES Metals "As Received"												
Lithium	J	2.13	2.00	10.0	ug/L	1.00	1	SKJ	08/15/17	1910	1686139	2
Rad Gas Flow Proportional Counting												
GFPC, Ra228, Liquid "As Received"												
Radium-228	U	ND	1.88	3.00	pCi/L			JXC9	08/21/17	1207	1692834	3
Rad Radium-226												
Lucas Cell, Ra226, liquid "As Received"												
Radium-226		1.36	0.255	1.00	pCi/L			MXH8	08/15/17	0745	1686420	4

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	JXM8	07/27/17	1702	1686136

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8 SC_NPDES	
3	EPA 904.0/SW846 9320 Modified	
4	EPA 903.1 Modified	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium-133 Tracer	GFPC, Ra228, Liquid "As Received"			91.5	(15%-125%)

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: August 22, 2017

Page 1 of 4

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 428960

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1686433										
QC1203840942	428957001	DUP									
Fluoride		J	0.038	J	0.038	mg/L	0 ^	(+/-0.100)	MXL2	07/28/17	21:52
QC1203840943	428960008	DUP									
Fluoride		J	0.0406	J	0.041	mg/L	0.98 ^	(+/-0.100)		07/29/17	09:54
QC1203840941	LCS										
Fluoride	2.50				2.35	mg/L		93.9 (90%-110%)		07/28/17	20:54
QC1203840940	MB										
Fluoride				U	ND	mg/L				07/28/17	20:25
QC1203840944	428957001	PS									
Fluoride	2.50	J	0.038		2.33	mg/L		91.6 (90%-110%)		07/28/17	22:20
QC1203840945	428960008	PS									
Fluoride	2.50	J	0.0406		2.34	mg/L		92.1 (90%-110%)		07/29/17	10:23
Metals Analysis - ICPMS											
Batch	1686139										
QC1203840299	428960001	DUP									
Lithium		J	2.13	J	2.13	ug/L	0.235 ^	(+/-10.0)	SKJ	08/15/17	19:14
QC1203840298	LCS										
Lithium	50.0				51.1	ug/L		102 (80%-120%)		08/15/17	19:06
QC1203840297	MB										
Lithium				U	ND	ug/L				08/15/17	19:03
QC1203840300	428960001	MS									
Lithium	50.0	J	2.13		53.0	ug/L		102 (75%-125%)		08/15/17	19:18

GEL LABORATORIES LLC

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QC Summary

Workorder: 428960

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Metals Analysis - ICPMS											
Batch	1686139										
QC1203840301	428960001	SDILT									
Lithium	J	2.13	U	ND	ug/L	N/A		(0%-10%)	SKJ	08/15/17	19:22
Rad Gas Flow											
Batch	1692834										
QC1203856709	428957008	DUP									
Radium-228		4.94	U	1.31	pCi/L	116*		(0% - 100%)	JXC9	08/21/17	12:08
QC1203856710	LCS										
Radium-228	19.8			21.6	pCi/L		109	(75%-125%)		08/21/17	12:08
QC1203856708	MB										
Radium-228			U	1.31	pCi/L					08/21/17	12:08
Rad Ra-226											
Batch	1686420										
QC1203840913	428957008	DUP									
Radium-226		1.31		1.32	pCi/L	0.412		(0% - 100%)	MXH8	08/15/17	08:15
QC1203840915	LCS										
Radium-226	26.0			24.8	pCi/L		95.7	(75%-125%)		08/15/17	08:45
QC1203840912	MB										
Radium-226			U	0.0314	pCi/L					08/15/17	08:15
QC1203840914	428957008	MS									
Radium-226	130	1.31		124	pCi/L		94.3	(75%-125%)		08/15/17	08:15

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
- B The target analyte was detected in the associated blank.

GEL LABORATORIES LLC

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QC Summary

Workorder: 428960

Page 3 of 4

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
BD											
E											
E											
FA											
FB											
H											
J											
K											
L											
M											
M											
N											
N/A											
NI											
ND											
NJ											
Q											
R											
R											
U											
UI											
UJ											
UL											
X											
Y											
Z											
^											
d											
e											
h											

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QC Summary

Workorder: 428960

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<u>Parmname</u>	<u>NOM</u>	<u>Sample Qual</u>	<u>QC</u>	<u>Units</u>	<u>RPD%</u>	<u>REC%</u>	<u>Range</u>	<u>Anlst</u>	<u>Date</u>	<u>Time</u>
-----------------	------------	--------------------	-----------	--------------	-------------	-------------	--------------	--------------	-------------	-------------

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27749**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: July 06, 2017 16:30
 Date & Time Submitted: July 07, 2017 08:05
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 170707002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.45	1.0	mg/L	7/13/17 11:28	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.11	0.00	S.U.	7/10/17 09:14	BF
Sulfates by IC EPA 300.0	105	1.0	mg/L	7/13/17 11:28	BB
Total Dissolved Solid-SM2540C	347	2.0	mg/L	7/11/17 13:20	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27751**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: July 06, 2017 17:50
 Date & Time Submitted: July 07, 2017 08:05
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 170707002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	19.74	0.50	mg/L	7/13/17 11:28	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.28	0.00	S.U.	7/10/17 09:14	BF
Sulfates by IC EPA 300.0	11.32	0.50	mg/L	7/13/17 11:28	BB
Total Dissolved Solid-SM2540C	246	2.0	mg/L	7/11/17 13:20	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27797**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: July 10, 2017 09:15
 Date & Time Submitted: July 11, 2017 09:54
 Collected by: S.SANSBURY Location Code: WAG01TDS

MW 1

Login Record File: 170711003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.37	0.50	mg/L	7/12/17 16:17	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.73	0.00	S.U.	7/11/17 10:33	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	7/12/17 16:17	BB
Total Dissolved Solid-SM2540C	33	2.0	mg/L	7/12/17 16:10	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27798**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: July 10, 2017 10:55

Date & Time Submitted: July 11, 2017 09:54

Collected by: S.SANSBURY Location Code: WAAP101TDS

AP1-01

Login Record File: 170711003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	187	1.0	mg/L	7/12/17 16:17	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.58	0.00	S.U.	7/11/17 10:33	BF
Sulfates by IC EPA 300.0	5.52	1.0	mg/L	7/12/17 16:17	BB
Total Dissolved Solid-SM2540C	442	2.0	mg/L	7/12/17 16:10	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27799**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: July 10, 2017 12:30
 Date & Time Submitted: July 11, 2017 09:54
 Collected by: S.SANSBURY Location Code: WAAP102TDS

AP1-02

Login Record File: 170711003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	57.76	1.0	mg/L	7/12/17 16:17	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.32	0.00	S.U.	7/11/17 10:33	BF
Sulfates by IC EPA 300.0	8.60	1.0	mg/L	7/12/17 16:17	BB
Total Dissolved Solid-SM2540C	313	2.0	mg/L	7/12/17 16:10	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27800**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: July 10, 2017 14:20

Date & Time Submitted: July 11, 2017 09:54

Collected by: S.SANSBURY Location Code: WAAP103TDS

AP1-03

Login Record File: 170711003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	57.07	1.0	mg/L	7/12/17 16:17	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.54	0.00	S.U.	7/11/17 10:33	BF
Sulfates by IC EPA 300.0	58.29	1.0	mg/L	7/12/17 16:17	BB
Total Dissolved Solid-SM2540C	391	2.0	mg/L	7/12/17 16:10	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27801**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: July 10, 2017 16:20

Date & Time Submitted: July 11, 2017 09:54

Collected by: S.SANSBURY Location Code: WAAP104TDS

AP1-04

Login Record File: 170711003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	11.66	0.50	mg/L	7/12/17 16:17	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.51	0.00	S.U.	7/11/17 10:33	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	7/12/17 16:17	BB
Total Dissolved Solid-SM2540C	446	2.0	mg/L	7/12/17 16:10	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27945**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: July 24, 2017 14:10
 Date & Time Submitted: July 26, 2017 12:38
 Collected by: A.HILL Location Code: WAFGD01TDS

FGD-01

Login Record File: 170726002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.84	0.50	mg/L	7/27/17 13:37	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.86	0.00	S.U.	7/31/17 11:53	PRC
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	7/27/17 13:37	BB
Total Dissolved Solid-SM2540C	22	2.0	mg/L	7/28/17 12:10	BF

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27753**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: July 06, 2017 16:30
 Date & Time Submitted: July 07, 2017 08:05
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 170707002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Arsenic by ICP_MS 200.8	4.6	1.0	ppb	7/13/17 13:48	CDB
Barium by ICP-OES 200.7	145	10.0	ppb	7/13/17 10:10	CDB
Beryllium EPA 200.7	2.6	2.0	ppb	7/13/17 10:10	CDB
Boron - EPA 200.7	Less than	1000	ppb	7/13/17 10:10	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Calcium EPA 200.7	21700	1000	ppb	7/13/17 10:10	CDB
Chromium by ICP_MS 200.8	1.5	1.0	ppb	7/13/17 13:48	CDB
Cobalt by ICP_MS 200.8	14.9	1.0	ppb	7/13/17 13:48	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lithium (CWA) 200.7	9.4	2.0	ppb	7/13/17 10:10	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/10/17 14:30	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Selenium by ICP-MS 200.8	11.4	5.0	ppb	7/13/17 13:48	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore C221

Sample ID: **AB27755**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: July 06, 2017 17:50
 Date & Time Submitted: July 07, 2017 08:05
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 170707002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Barium by ICP-OES 200.7	197	10.0	ppb	7/13/17 10:10	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Boron - EPA 200.7	Less than	1000	ppb	7/13/17 10:10	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Calcium EPA 200.7	11620	1000	ppb	7/13/17 10:10	CDB
Chromium by ICP_MS 200.8	1.4	1.0	ppb	7/13/17 13:48	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/10/17 14:30	PRC
Molybdenum - EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	7/13/17 13:48	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27764**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: July 10, 2017 09:15
 Date & Time Submitted: July 11, 2017 09:54
 Collected by: S.SANSBURY Location Code: WAG01TM

MW 1

Login Record File: 170711001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Arsenic by ICP_MS 200.8	Less than	2.0	ppb	7/13/17 13:48	CDB
Barium by ICP-OES 200.7	54.9	10.0	ppb	7/13/17 10:10	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Boron - EPA 200.7	Less than	1000	ppb	7/13/17 10:10	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Calcium EPA 200.7	700	100	ppb	7/13/17 10:10	CDB
Chromium by ICP_MS 200.8	Less than	2.0	ppb	7/13/17 13:48	CDB
Cobalt by ICP_MS 200.8	Less than	2.0	ppb	7/13/17 13:48	CDB
Lead by ICP-MS 200.8	1.2	1.0	ppb	7/13/17 13:48	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/14/17 12:28	MC
Molybdenum - EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Selenium by ICP-MS 200.8	Less than	10.0	ppb	7/13/17 13:48	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27765**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: July 10, 2017 10:55
 Date & Time Submitted: July 11, 2017 09:54
 Collected by: S.SANSBURY Location Code: WAAP101TM

AP1-01

Login Record File: 170711001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Barium by ICP-OES 200.7	214	10.0	ppb	7/13/17 10:10	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Boron - EPA 200.7	1340	1000	ppb	7/13/17 10:10	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Calcium EPA 200.7	52450	1000	ppb	7/13/17 10:10	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/14/17 12:28	MC
Molybdenum - EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	7/13/17 13:48	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27766**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: July 10, 2017 12:30
 Date & Time Submitted: July 11, 2017 09:54
 Collected by: S.SANSBURY Location Code: WAAP102TM

AP1-02

Login Record File: 170711001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Arsenic by ICP_MS 200.8	48.7	1.0	ppb	7/13/17 13:48	CDB
Barium by ICP-OES 200.7	185	10.0	ppb	7/13/17 10:10	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Boron - EPA 200.7	Less than	1000	ppb	7/13/17 10:10	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Calcium EPA 200.7	40300	1000	ppb	7/13/17 10:10	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lithium (CWA) 200.7	5.4	2.0	ppb	7/13/17 10:10	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/14/17 12:28	MC
Molybdenum - EPA 200.8	7.2	1.0	ppb	7/13/17 13:48	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	7/13/17 13:48	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27767**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: July 10, 2017 14:20
 Date & Time Submitted: July 11, 2017 09:54
 Collected by: S.SANSBURY Location Code: WAAP103TM

AP1-03

Login Record File: 170711001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Arsenic by ICP_MS 200.8	1160	10.0	ppb	7/13/17 13:48	CDB
Barium by ICP-OES 200.7	175	10.0	ppb	7/13/17 10:10	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Boron - EPA 200.7	Less than	1000	ppb	7/13/17 10:10	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Calcium EPA 200.7	67660	1000	ppb	7/13/17 10:10	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lithium (CWA) 200.7	53.6	2.0	ppb	7/13/17 10:10	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/14/17 12:28	MC
Molybdenum - EPA 200.8	12.1	1.0	ppb	7/13/17 13:48	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	7/13/17 13:48	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27768**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: July 10, 2017 16:20
 Date & Time Submitted: July 11, 2017 09:54
 Collected by: S.SANSBURY Location Code: WAAP104TM

AP1-04

Login Record File: 170711001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Arsenic by ICP_MS 200.8	69.1	1.0	ppb	7/13/17 13:48	CDB
Barium by ICP-OES 200.7	218	10.0	ppb	7/13/17 10:10	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Boron - EPA 200.7	1583	1000	ppb	7/13/17 10:10	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Calcium EPA 200.7	93820	1000	ppb	7/13/17 10:10	CDB
Chromium by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Cobalt by ICP_MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lead by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Lithium (CWA) 200.7	Less than	2.0	ppb	7/13/17 10:10	CDB
Mercury (CWA) by EPA 245.2	Less than	0.2	ppb	7/14/17 12:28	MC
Molybdenum - EPA 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	7/13/17 13:48	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	7/13/17 13:48	CDB

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB27965**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: July 24, 2017 14:10
 Date & Time Submitted: July 26, 2017 12:38
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 170726003

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Antimony by ICP-MS 200.8	Less than	1.0	ppb	8/2/17 12:39	CDB
Arsenic by ICP_MS 200.8	Less than	1.0	ppb	8/2/17 12:39	CDB
Barium by ICP-OES 200.7	78.2	10.0	ppb	7/31/17 13:57	CDB
Beryllium EPA 200.7	Less than	2.0	ppb	7/31/17 13:57	CDB
Boron - EPA 200.7	Less than	1000	ppb	7/31/17 13:57	CDB
Cadmium by ICP_MS EPA 200.8	Less than	1.0	ppb	8/2/17 12:39	CDB
Calcium EPA 200.7	1909	1000	ppb	7/31/17 13:57	CDB
Chromium by ICP_MS 200.8	1.2	1.0	ppb	8/2/17 12:39	CDB
Cobalt by ICP_MS 200.8	1.1	1.0	ppb	8/2/17 12:39	CDB
Lead by ICP-MS 200.8	1.2	1.0	ppb	8/2/17 12:39	CDB
Lithium (CWA) 200.7	2.4	2.0	ppb	7/31/17 13:57	CDB
Mercury - 7470A (RCRA)	Less than	0.2	ppb	8/1/17 14:16	MC
Molybdenum - EPA 200.8	Less than	1.0	ppb	8/2/17 12:39	CDB
Selenium by ICP-MS 200.8	Less than	5.0	ppb	8/2/17 12:39	CDB
Thallium by ICP-MS 200.8	Less than	1.0	ppb	8/2/17 12:39	CDB

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

Approved By: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 09/26/2017

Time Sampled: 12:00:00AM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-AP-01A
NAME	Lab. Certificate No.	32006
Field pH S.U.		4.550
Field Sp. Conductivity micromhos/cm		40.000
Field Turbidity NTU		5.10
ORP mV		253.900
Oxygen, dissolved mg/L		5.390
Temp (Celcius) degrees C		21.530
Water level elevation ft		114.05

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 09/27/2017

Time Sampled: 12:00:00AM

 year-month-day (Numerical)

STATION NUMBERS

PARAMETER	NUMBER	MW-FGD-01
NAME	Lab. Certificate No.	32006
Field pH S.U.		4.510
Field Sp. Conductivity micromhos/cm		37.000
Field Turbidity NTU		3.20
ORP mV		312.600
Oxygen, dissolved mg/L		3.580
Temp (Celcius) degrees C		19.340
Water level elevation ft		114.98

Authorized Release By: _____

Date: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL
GROUND-WATER MONITORING REPORT

Facility: Wateree Station

Permit No.: _____

County: Richland

Date Sampled: 09/26/2017

Time Sampled: 12:00:00AM

year-month-day (Numerical)

STATION NUMBERS

PARAMETER NAME	NUMBER Lab. Certificate No.	MW-AP-01	MW-AP-02	MW-AP-03	MW-AP-04	MW-AP-05	MW-AP-08
		32006	32006	32006	32006	32006	32006
Field pH S.U.		6.710	6.440	6.350	6.540	6.120	5.950
Field Sp. Conductivity micromhos/cm		784.000	645.000	627.000	675.000	430.000	483.000
Field Turbidity NTU		2.20	3.00	2.60	6.40	6.40	6.80
ORP mV		-122.000	-52.300	-63.900	-72.400	-60.900	-49.300
Oxygen, dissolved mg/L		0.810	86.000	0.770	0.640	0.720	0.710
Temp (Celcius) degrees C		21.900	18.590	18.540	18.550	17.630	19.370
Water level elevation ft		87.83	84.93	86.67	86.22	82.09	82.26

Authorized Release By: _____

Date: _____

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 434131 GEL Work Order: 434131

The Qualifiers in this report are defined as follows:

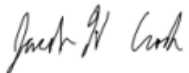
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a Tracer compound
- ** Analyte is a surrogate compound
- H Analytical holding time was exceeded
- J Value is estimated
- U Analyte was analyzed for, but not detected above the MDL, MDA, MDC or LOD.

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.

Reviewed by _____



GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: October 18, 2017

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: AP1-04
Sample ID: 434131006
Matrix: Ground Water
Collect Date: 26-SEP-17 12:00
Receive Date: 03-OCT-17
Collector: Client

Project: SCEG01716c
Client ID: GEEL003

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.286	0.033	0.100	mg/L		1	JXH5	10/05/17	1545	1706773	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration

Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: October 18, 2017

Company : GEL Engineering, LLC
Address : 2040 Savage Rd

Charleston, South Carolina 29417
Contact: Robert Gardner
Project: Wateree CCR

Client Sample ID: AP1-99 Project: SCEG01716c
Sample ID: 434131008 Client ID: GEEL003
Matrix: Ground Water
Collect Date: 26-SEP-17 14:00
Receive Date: 03-OCT-17
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA300.0 Fluoride in Liquid "As Received"												
Fluoride		0.365	0.033	0.100	mg/L		1	JXH5	10/05/17	1741	1706773	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	

Notes:

Column headers are defined as follows:

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

GEL LABORATORIES LLC

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

QC Summary

Report Date: October 18, 2017

Page 1 of 2

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 434131

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1706773										
QC1203889579	434134001	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		JXH5	10/05/17	21:32
QC1203889683	434131001	DUP									
Fluoride			0.306		0.304	mg/L	0.557 ^	(+/-0.100)		10/05/17	12:53
QC1203889577	LCS										
Fluoride	2.50				2.35	mg/L		93.9 (90%-110%)		10/05/17	11:55
QC1203889576	MB										
Fluoride				U	ND	mg/L				10/05/17	11:26
QC1203889581	434134001	PS									
Fluoride	2.50	U	ND		2.53	mg/L		101 (90%-110%)		10/05/17	22:59
QC1203889684	434131001	PS									
Fluoride	2.50		0.306		2.56	mg/L		90.2 (90%-110%)		10/06/17	10:41

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- NI 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.

GEL LABORATORIES LLC

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

QC Summary

Workorder: 434131

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
R											
R											
U											
X											
Z											
^											
d											
e											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.

GEL LABORATORIES LLC

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

Certificate of Analysis Report for

GEEL003 GEL Engineering, LLC

Client SDG: 434133 GEL Work Order: 434133

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
- H Analytical holding time was exceeded
- 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.

Reviewed by _____



GEL LABORATORIES LLC

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

QC Summary

Report Date: October 18, 2017

Page 1 of 2

GEL Engineering, LLC
2040 Savage Rd
Charleston, South Carolina

Contact: Robert Gardner

Workorder: 434133

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Ion Chromatography											
Batch	1706773										
QC1203889579	434134001	DUP									
Fluoride		U	ND	U	ND	mg/L	N/A		JXH5	10/05/17	21:32
QC1203889683	434131001	DUP									
Fluoride			0.306		0.304	mg/L	0.557 ^	(+/-0.100)		10/05/17	12:53
QC1203889577	LCS										
Fluoride	2.50				2.35	mg/L		93.9 (90%-110%)		10/05/17	11:55
QC1203889576	MB										
Fluoride				U	ND	mg/L				10/05/17	11:26
QC1203889581	434134001	PS									
Fluoride	2.50	U	ND		2.53	mg/L		101 (90%-110%)		10/05/17	22:59
QC1203889684	434131001	PS									
Fluoride	2.50		0.306		2.56	mg/L		90.2 (90%-110%)		10/06/17	10:41

Notes:

The Qualifiers in this report are defined as follows:

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded
- J Value is estimated
- N/A RPD or %Recovery limits do not apply.
- NI 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.

GEL LABORATORIES LLC

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QC Summary

Workorder: 434133

Page 2 of 2

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
R											
R											
U											
X											
Z											
^											
d											
e											
h											

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ 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.



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28770**

Wateree Well AP1-05 (NPDES/CCR)

Date & Time Sampled: September 26, 2017 08:27
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP105TDS

AP1-05

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	19.5	0.50	mg/L	9/28/17 09:25	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.28	0.00	S.U.	9/27/17 15:30	BF
Sulfates by IC EPA 300.0	1.35	0.50	mg/L	9/28/17 09:25	BB
Total Dissolved Solid-SM2540C	279	2.0	mg/L	9/28/17 15:14	BF

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

Approved By: _____



Central Laboratory (P-08)
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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28771**

Wateree Well MW 8 (NPDES/CCR)

Date & Time Sampled: September 26, 2017 09:20
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAG08TDS

MW 8

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.3	1.0	mg/L	9/28/17 09:25	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.14	0.00	S.U.	9/27/17 15:30	BF
Sulfates by IC EPA 300.0	93.0	1.0	mg/L	9/28/17 09:25	BB
Total Dissolved Solid-SM2540C	374	2.0	mg/L	9/28/17 15:14	BF

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

Approved By: _____



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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28772**

Wateree Well AP1-02 (NPDES/CCR)

Date & Time Sampled: September 26, 2017 09:48
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP102TDS

AP1-02

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	104	1.0	mg/L	9/28/17 09:25	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.59	0.00	S.U.	9/27/17 15:30	BF
Sulfates by IC EPA 300.0	41.4	1.0	mg/L	9/28/17 09:25	BB
Total Dissolved Solid-SM2540C	407	2.0	mg/L	9/28/17 15:14	BF

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

Approved By: _____



Central Laboratory (P-08)
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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28773**

Wateree NPDES Well MW 1 (NPDES)

Date & Time Sampled: September 26, 2017 10:20
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAG01TDS

MW 1

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.97	0.50	mg/L	9/28/17 09:25	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.43	0.00	S.U.	9/27/17 15:30	BF
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/28/17 09:25	BB
Total Dissolved Solid-SM2540C	27	2.0	mg/L	9/28/17 15:14	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28774**

Wateree Well AP1-03 (NPDES/CCR)

Date & Time Sampled: September 26, 2017 10:54
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP103TDS

AP1-03

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	77.8	0.50	mg/L	9/28/17 09:25	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.66	0.00	S.U.	9/27/17 15:30	BF
Sulfates by IC EPA 300.0	69.2	0.50	mg/L	9/28/17 09:25	BB
Total Dissolved Solid-SM2540C	402	2.0	mg/L	9/28/17 15:14	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28775**

Wateree Well AP1-04 (NPDES/CCR)

Date & Time Sampled: September 26, 2017 12:00

Date & Time Submitted: September 27, 2017 10:34

Collected by: A.HILL Location Code: WAAP104TDS

AP1-04

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	15.8	0.50	mg/L	9/28/17 09:25	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.78	0.00	S.U.	9/27/17 15:30	BF
Sulfates by IC EPA 300.0	0.67	0.50	mg/L	9/28/17 09:25	BB
Total Dissolved Solid-SM2540C	389	2.0	mg/L	9/28/17 15:14	BF

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

Approved By: _____



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 Fax: (803) 217-9911

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28776**

Wateree Well AP1-01 (NPDES/CCR)

Date & Time Sampled: September 26, 2017 13:04

Date & Time Submitted: September 27, 2017 10:34

Collected by: A.HILL Location Code: WAAP101TDS

AP1-01

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	195	1.5	mg/L	9/28/17 09:25	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	6.73	0.00	S.U.	9/27/17 15:30	BF
Sulfates by IC EPA 300.0	11.1	1.5	mg/L	9/28/17 09:25	BB
Total Dissolved Solid-SM2540C	473	2.0	mg/L	9/28/17 15:14	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28841**

Wateree Well FGD-01 (NPDES/CCR)

Date & Time Sampled: September 27, 2017 14:15

Date & Time Submitted: September 28, 2017 11:17

Collected by: A.HILL

Location Code: WAFGD01TDS

FGD-01

Login Record File: 170928002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.88	0.50	mg/L	9/29/17 10:59	BB
pH by SM4500HB(2011)	4.89	0.00	S.U.	9/28/17 11:50	BF
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/29/17 10:59	BB
Total Dissolved Solid-SM2540C	29	2.0	mg/L	10/3/17 14:05	BF

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28791**

Wateree Well AP1-05 TM (NPDES/CCR)

Date & Time Sampled: September 26, 2017 08:27
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP105TM

AP1-05

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	1000	ppb	9/28/17 13:34	MC
Calcium EPA 200.7	12600	100	ppb	9/28/17 13:34	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28792**

Wateree Well MW 8 TM (NPDES/CCR)

Date & Time Sampled: September 26, 2017 09:20
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAG08TM

MW 8

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	1000	ppb	9/28/17 13:34	MC
Calcium EPA 200.7	20400	100	ppb	9/28/17 13:34	MC

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

Approved By: _____



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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28793**

Wateree Well AP1-02 TM (NPDES/CCR)

Date & Time Sampled: September 26, 2017 09:48
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP102TM

AP1-02

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	1070	1000	ppb	9/28/17 13:34	MC
Calcium EPA 200.7	63000	100	ppb	9/28/17 13:34	MC

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

Approved By: _____



Central Laboratory (P-08)
2102 North Lake Drive
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January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28794**

Wateree NPDES Well MW 1 Total Metals (NPDES)

Date & Time Sampled: September 26, 2017 10:20
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAG01TM

MW 1

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	1000	ppb	9/28/17 13:34	MC
Calcium EPA 200.7	511	100	ppb	9/28/17 13:34	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28795**

Wateree Well AP1-03 TM (NPDES/CCR)

Date & Time Sampled: September 26, 2017 10:54
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP103TM

AP1-03

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	1000	1000	ppb	9/28/17 13:34	MC
Calcium EPA 200.7	73900	100	ppb	9/28/17 13:34	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28796**

Wateree Well AP1-04 TM (NPDES/CCR)

Date & Time Sampled: September 26, 2017 12:00
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP104TM

AP1-04

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	2290	1000	ppb	9/28/17 13:34	MC
Calcium EPA 200.7	98900	100	ppb	9/28/17 13:34	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28797**

Wateree Well AP1-01 TM (NPDES/CCR)

Date & Time Sampled: September 26, 2017 13:04
 Date & Time Submitted: September 27, 2017 10:34
 Collected by: A.HILL Location Code: WAAP101TM

AP1-01

Login Record File: 170927001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	1900	1000	ppb	9/28/17 13:34	MC
Calcium EPA 200.7	59700	100	ppb	9/28/17 13:34	MC

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

Approved By: _____



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

January 31, 2018

REPORT TO:
Mike Moore

Sample ID: **AB28859**

Wateree Well FGD-01 TM (NPDES/CCR)

Date & Time Sampled: September 27, 2017 14:15
 Date & Time Submitted: September 28, 2017 11:17
 Collected by: A.HILL Location Code: WAFGD01TM

FGD-01

Login Record File: 170928002

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(MRL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	1000	ppb	10/2/17 16:00	CDB
Calcium EPA 200.7	638	100	ppb	10/2/17 16:00	CDB

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

Approved By: _____



APPENDIX B

Statistical Analysis of Detection Monitoring Groundwater Quality Results

Wateree Station
Detection Monitoring Summary

Run Id: 1

Location Id: MW-AP-01

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Boron, total ug/L	07/10/2017	AB27765	--	--	1.340	y		Upward
Boron, total ug/L	09/26/2017	AB28797	--	--	1.900	y		Upward

Run Id: 2

Location Id: MW-AP-01

Compliance Test: Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Calcium, tot ug/L	07/10/2017	AB27765	1 of 2	1.910	52.500	y		Upward
Calcium, tot ug/L	09/26/2017	AB28797	1 of 2	1.910	59.700	y		Upward

Run Id: 3

Location Id: MW-AP-01

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Chlorides mg/L	07/10/2017	AB27798	1 of 2	7.669	187.000	y		Upward
Chlorides mg/L	09/26/2017	AB28776	1 of 2	7.669	195.000	y		Upward

Run Id: 4

Location Id: MW-AP-01

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 4

Location Id: MW-AP-01

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Field pH S.U.	07/10/2017	FLD20170710	1 of 2	5.270	6.250	y/n		--
Field pH S.U.	09/26/2017	FLD20170926	1 of 2	5.270	6.710	y/n		--

Run Id: 5

Location Id: MW-AP-01

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Fluoride, total mg/L	07/10/2017	427697002	--	--	0.340	y		None
Fluoride, total mg/L	09/26/2017	434131007	--	--	0.364	y		None

Run Id: 6

Location Id: MW-AP-01

Compliance Test: Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Sulfate, tot mg/L	07/10/2017	AB27798	1 of 2	0.830	5.520	y		None
Sulfate, tot mg/L	09/26/2017	AB28776	1 of 2	0.830	11.100	y		None

Run Id: 7

Location Id: MW-AP-01

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 7

Location Id: MW-AP-01

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Total Dissolved Solids mg/L	07/10/2017	AB27798	1 of 2	44.248	442.000	y		Upward
Total Dissolved Solids mg/L	09/26/2017	AB28776	1 of 2	44.248	473.000	y		Upward

Run Id: 8

Location Id: MW-AP-02

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Boron, total ug/L	07/10/2017	AB27766	--	--	< 1.000	n		--
Boron, total ug/L	09/26/2017	AB28793	--	--	1.070	n		--

Run Id: 9

Location Id: MW-AP-02

Compliance Test: Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Calcium, tot ug/L	07/10/2017	AB27766	1 of 2	1.910	40.300	y		None
Calcium, tot ug/L	09/26/2017	AB28793	1 of 2	1.910	63.000	y		None

Run Id: 10

Location Id: MW-AP-02

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

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Run Id: 10

Location Id: MW-AP-02

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Chlorides mg/L	07/10/2017	AB27799	1 of 2	7.669	57.760	y		None
Chlorides mg/L	09/26/2017	AB28772	1 of 2	7.669	104.000	y		None

Run Id: 11

Location Id: MW-AP-02

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Field pH S.U.	07/10/2017	FLD20170710	1 of 2	5.270	5.990	y/n		--
Field pH S.U.	09/26/2017	FLD20170926	1 of 2	5.270	6.440	y/n		--

Run Id: 12

Location Id: MW-AP-02

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Fluoride, total mg/L	07/10/2017	427697003	--	--	0.199	y		None
Fluoride, total mg/L	09/26/2017	434131004	--	--	0.334	y		None

Run Id: 13

Location Id: MW-AP-02

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 13

Location Id: MW-AP-02

Compliance Test: Non-Parametric Prediction Interval on Background Useing largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Sulfate, tot mg/L	07/10/2017	AB27799	1 of 2	0.830	8.600	y		None
Sulfate, tot mg/L	09/26/2017	AB28772	1 of 2	0.830	41.400	y		None

Run Id: 14

Location Id: MW-AP-02

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Total Dissolved Solids mg/L	07/10/2017	AB27799	1 of 2	44.248	313.000	y		None
Total Dissolved Solids mg/L	09/26/2017	AB28772	1 of 2	44.248	407.000	y		None

Run Id: 15

Location Id: MW-AP-03

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Boron, total ug/L	07/10/2017	AB27767	--	--	< 1.000	n		--
Boron, total ug/L	09/26/2017	AB28795	--	--	1.000	n		--

Run Id: 16

Location Id: MW-AP-03

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 16

Location Id: MW-AP-03

Compliance Test: Non-Parametric Prediction Interval on Background Useing largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Calcium, tot ug/L	07/10/2017	AB27767	1 of 2	1.910	67.700	y		None
Calcium, tot ug/L	09/26/2017	AB28795	1 of 2	1.910	73.900	y		None

Run Id: 17

Location Id: MW-AP-03

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Chlorides mg/L	07/10/2017	AB27800	1 of 2	7.669	57.070	y		Upward
Chlorides mg/L	09/26/2017	AB28774	1 of 2	7.669	77.800	y		Upward

Run Id: 18

Location Id: MW-AP-03

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Field pH S.U.	07/10/2017	FLD20170710	1 of 2	5.270	6.100	y/n		--
Field pH S.U.	09/26/2017	FLD20170926	1 of 2	5.270	6.350	y/n		--

Run Id: 19

Location Id: MW-AP-03

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

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Detection Monitoring Summary

Run Id: 19**Location Id:** MW-AP-03**Compliance Test:** Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Fluoride, total mg/L	07/10/2017	427697004	--	--	0.518	y		Downward
Fluoride, total mg/L	09/26/2017	434131005	--	--	0.674	y		Downward

Run Id: 20**Location Id:** MW-AP-03**Compliance Test:** Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Sulfate, tot mg/L	07/10/2017	AB27800	1 of 2	0.830	58.290	y		None
Sulfate, tot mg/L	09/26/2017	AB28774	1 of 2	0.830	69.200	y		None

Run Id: 21**Location Id:** MW-AP-03**Compliance Test:** Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Total Dissolved Solids mg/L	07/10/2017	AB27800	1 of 2	44.248	391.000	y		Upward
Total Dissolved Solids mg/L	09/26/2017	AB28774	1 of 2	44.248	402.000	y		Upward

Run Id: 22**Location Id:** MW-AP-04

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 22

Location Id: MW-AP-04

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Boron, total ug/L	07/10/2017	AB27768	--	--	1.580	y		None
Boron, total ug/L	09/26/2017	AB28796	--	--	2.290	y		None

Run Id: 23

Location Id: MW-AP-04

Compliance Test: Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Calcium, tot ug/L	07/10/2017	AB27768	1 of 2	1.910	93.800	y		None
Calcium, tot ug/L	09/26/2017	AB28796	1 of 2	1.910	98.900	y		None

Run Id: 24

Location Id: MW-AP-04

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Chlorides mg/L	07/10/2017	AB27801	1 of 2	7.669	11.660	y		None
Chlorides mg/L	09/26/2017	AB28775	1 of 2	7.669	15.800	y		None

Run Id: 25

Location Id: MW-AP-04

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 25

Location Id: MW-AP-04

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Field pH S.U.	07/10/2017	FLD20170710	1 of 2	5.270	6.260	y/n		--
Field pH S.U.	09/26/2017	FLD20170926	1 of 2	5.270	6.540	y/n		--

Run Id: 26

Location Id: MW-AP-04

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Fluoride, total mg/L	07/10/2017	427697005	--	--	0.188	y		None
Fluoride, total mg/L	09/26/2017	434131006	--	--	0.286	y		None

Run Id: 27

Location Id: MW-AP-04

Compliance Test: Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Sulfate, tot mg/L	07/10/2017	AB27801	1 of 2	0.830	< 0.000	n		--
Sulfate, tot mg/L	09/26/2017	AB28775	1 of 2	0.830	0.670	n		--

Run Id: 28

Location Id: MW-AP-04

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 28

Location Id: MW-AP-04

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Total Dissolved Solids mg/L	07/10/2017	AB27801	1 of 2	44.248	446.000	y		None
Total Dissolved Solids mg/L	09/26/2017	AB28775	1 of 2	44.248	389.000	y		None

Run Id: 29

Location Id: MW-AP-05

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Boron, total ug/L	07/06/2017	AB27755	--	--	< 1.000	n		--
Boron, total ug/L	09/26/2017	AB28791	--	--	< 1.000	n		--

Run Id: 30

Location Id: MW-AP-05

Compliance Test: Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Calcium, tot ug/L	07/06/2017	AB27755	1 of 2	1.910	11.600	y		None
Calcium, tot ug/L	09/26/2017	AB28791	1 of 2	1.910	12.600	y		None

Run Id: 31

Location Id: MW-AP-05

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

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Run Id: 31

Location Id: MW-AP-05

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Chlorides mg/L	07/06/2017	AB27751	1 of 2	7.669	19.740	y		None
Chlorides mg/L	09/26/2017	AB28770	1 of 2	7.669	19.500	y		None

Run Id: 32

Location Id: MW-AP-05

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Field pH S.U.	07/06/2017	FLD20170706	1 of 2	5.270	5.990	y/n		--
Field pH S.U.	09/26/2017	FLD20170926	1 of 2	5.270	6.120	y/n		--

Run Id: 33

Location Id: MW-AP-05

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Fluoride, total mg/L	07/06/2017	427698004	--	--	< 0.100	n		--
Fluoride, total mg/L	09/26/2017	434131003	--	--	< 0.100	n		--

Run Id: 34

Location Id: MW-AP-05

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 34

Location Id: MW-AP-05

Compliance Test: Non-Parametric Prediction Interval on Background Useing largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Sulfate, tot mg/L	07/06/2017	AB27751	1 of 2	0.830	11.320	y		None
Sulfate, tot mg/L	09/26/2017	AB28770	1 of 2	0.830	1.350	y		None

Run Id: 35

Location Id: MW-AP-05

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Total Dissolved Solids mg/L	07/06/2017	AB27751	1 of 2	44.248	246.000	y		None
Total Dissolved Solids mg/L	09/26/2017	AB28770	1 of 2	44.248	279.000	y		None

Run Id: 36

Location Id: MW-AP-08

Compliance Test: Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Boron, total ug/L	07/06/2017	AB27753	--	--	< 1.000	n		--
Boron, total ug/L	09/26/2017	AB28792	--	--	< 1.000	n		--

Run Id: 37

Location Id: MW-AP-08

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

Detection Monitoring Summary

Run Id: 37

Location Id: MW-AP-08

Compliance Test: Non-Parametric Prediction Interval on Background Useing largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Calcium, tot ug/L	07/06/2017	AB27753	1 of 2	1.910	21.700	y		None
Calcium, tot ug/L	09/26/2017	AB28792	1 of 2	1.910	20.400	y		None

Run Id: 38

Location Id: MW-AP-08

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Chlorides mg/L	07/06/2017	AB27749	1 of 2	7.669	18.450	y		None
Chlorides mg/L	09/26/2017	AB28771	1 of 2	7.669	18.300	y		None

Run Id: 39

Location Id: MW-AP-08

Compliance Test: Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Field pH S.U.	07/06/2017	FLD20170706	1 of 2	5.270	5.580	y/n		--
Field pH S.U.	09/26/2017	FLD20170926	1 of 2	5.270	5.950	y/n		--

Run Id: 40

Location Id: MW-AP-08

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

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Run Id: 40**Location Id:** MW-AP-08**Compliance Test:** Double Quantification Rule

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Fluoride, total mg/L	07/06/2017	427698002	--	--	0.304	y		None
Fluoride, total mg/L	09/26/2017	434131001	--	--	0.306	y		None

Run Id: 41**Location Id:** MW-AP-08**Compliance Test:** Non-Parametric Prediction Interval on Background Using largest background data value.

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Sulfate, tot mg/L	07/06/2017	AB27749	1 of 2	0.830	105.000	y		None
Sulfate, tot mg/L	09/26/2017	AB28771	1 of 2	0.830	93.000	y		None

Run Id: 42**Location Id:** MW-AP-08**Compliance Test:** Parametric Prediction Interval on Background

<u>Parameter</u>	<u>Sample Date</u>	<u>Lab Id</u>	<u>Re Testing</u>	<u>Upper Limit</u>	<u>Compliance Result</u>	<u>Exceedance</u>	<u>Possible SSI</u>	<u>Post-Hoc Trend</u>
Total Dissolved Solids mg/L	07/06/2017	AB27749	1 of 2	44.248	347.000	y		None
Total Dissolved Solids mg/L	09/26/2017	AB28771	1 of 2	44.248	374.000	y		None

NOTE: If trend test is performed, the background slope is listed under the Upper Limit heading and the compliance slope is listed under the Compliance Result heading.

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All Background Results Non-Detect

Location Id: MW-AP-01
Parameter: Boron, total

Run Id: 1

Method: Double Quantification Rule
Percent ND: 0
ND Approach: 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	1.340	1.340	0.044	1.000	0.000	N	N
09/26/2017	1.900	1.900	0.040	1.000	0.000	N	y

All Background Results Non-Detect

Location Id: MW-AP-01
Parameter: Fluoride, total

Run Id: 5

Method: Double Quantification Rule
Percent ND: 0
ND Approach: 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	0.340	0.340	0.033	0.100	0.000	N	N
09/26/2017	0.364	0.364	0.030	0.100	0.000	N	y

All Background Results Non-Detect

Location Id: MW-AP-02

Run Id: 8

Parameter: Boron, total

Method: Double Quantification Rule

Percent ND: 50

ND Approach: > 15% to <= 50% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	1.000	0.617	0.044	1.000	0.000	Y	N
09/26/2017	1.070	1.070	0.044	1.000	0.000	N	N

All Background Results Non-Detect

Location Id: MW-AP-02
Parameter: Fluoride, total

Run Id: 12

Method: Double Quantification Rule
Percent ND: 0
ND Approach: 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	0.199	0.199	0.033	0.100	0.000	N	N
09/26/2017	0.334	0.334	0.033	0.100	0.000	N	y

All Background Results Non-Detect

Location Id: MW-AP-03

Run Id: 15

Parameter: Boron, total

Method: Double Quantification Rule

Percent ND: 50

ND Approach: > 15% to <= 50% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	1.000	0.915	0.044	1.000	0.000	Y	N
09/26/2017	1.000	1.000	0.044	1.000	0.000	N	N

All Background Results Non-Detect

Location Id: MW-AP-03
Parameter: Fluoride, total

Run Id: 19

Method: Double Quantification Rule
Percent ND: 0
ND Approach: 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	0.518	0.518	0.033	0.100	0.000	N	N
09/26/2017	0.674	0.674	0.033	0.100	0.000	N	y

All Background Results Non-Detect

Location Id: MW-AP-04

Run Id: 22

Parameter: Boron, total

Method: Double Quantification Rule

Percent ND: 0

ND Approach: 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	1.580	1.580	0.044	1.000	0.000	N	N
09/26/2017	2.290	2.290	0.044	1.000	0.000	N	y

All Background Results Non-Detect

Location Id: MW-AP-04
Parameter: Fluoride, total

Run Id: 26

Method: Double Quantification Rule
Percent ND: 0
ND Approach: 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/10/2017	0.188	0.188	0.033	0.100	0.000	N	N
09/26/2017	0.286	0.286	0.033	0.100	0.000	N	y

All Background Results Non-Detect

Location Id: MW-AP-05
Parameter: Boron, total

Run Id: 29

Method: Double Quantification Rule
Percent ND: 100
ND Approach: > 50% to <= 100 % Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/06/2017	1.000	0.096	0.044	1.000	0.000	Y	N
09/26/2017	1.000	0.044	0.044	1.000	0.000	Y	N

All Background Results Non-Detect

Location Id: MW-AP-05
Parameter: Fluoride, total

Run Id: 33

Method: Double Quantification Rule
Percent ND: 100
ND Approach: > 50% to <= 100 % Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/06/2017	0.100	0.084	0.033	0.100	0.000	Y	N
09/26/2017	0.100	0.076	0.033	0.100	0.000	Y	N

All Background Results Non-Detect

Location Id: MW-AP-08

Run Id: 36

Parameter: Boron, total

Method: Double Quantification Rule

Percent ND: 100

ND Approach: > 50% to <= 100 % Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/06/2017	1.000	0.295	0.044	1.000	0.000	Y	N
09/26/2017	1.000	0.285	0.044	1.000	0.000	Y	N

All Background Results Non-Detect

Location Id: MW-AP-08
 Parameter: Fluoride, total

Run Id: 40

Method: Double Quantification Rule
 Percent ND: 0
 ND Approach: 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Modified Result</u>	<u>Analysis Result</u>	<u>Detection Limit</u>	<u>PQL</u>	<u>RL</u>	<u>Non Detect</u>	<u>Exceedance</u>
07/06/2017	0.304	0.304	0.033	0.100	0.000	N	N
09/26/2017	0.306	0.306	0.033	0.100	0.000	N	y

All Background Results Non-Detect

Wateree Station
Parametric Prediction Interval on Background - Background Data Calculation

<u>Number Of Locations:</u>	6	<u>Annual Site Wide False Positive Rate (SWFPR):</u>	0.10
<u>Number Of Parameters:</u>	7	<u>Sample Events per Year:</u>	2
<u>Sampling Plan:</u>	Interwell	<u>Verification Sampling:</u>	Pass 1 of 2 (one resample)

Background Locations: MW-AP-01A,MW-FGD-01

Insufficient Background: 0
DOR Tests: 2

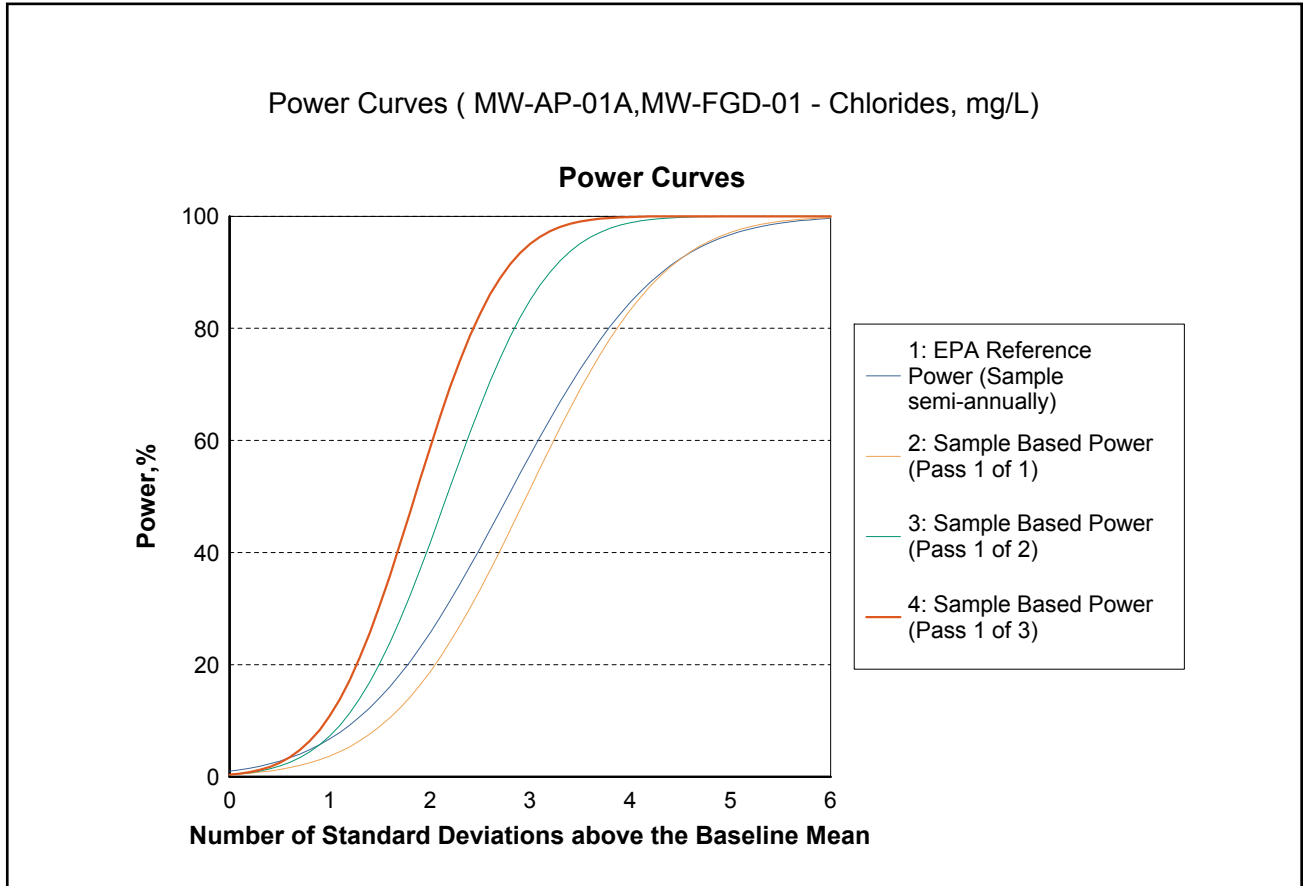
<u>Parameter Name:</u>	Chlorides, mg/L	<u>Background Date Range:</u>	05/11/2016 to 09/25/2017
<u>Alpha Per Test FPR:</u>	0.00174	<u>Option for LT Pts:</u>	0% to <= 15% Substitute ½ PQL
<u>Total Pts</u>	16	<u>Kappa for Selected Verification Plan:</u>	1.968
<u>LT Pts</u>	0	<u>Mean</u>	5.5888
<u>%LT Pts</u>	0	<u>StdDev</u>	1.0567
<u>Normal/Log Normal</u>	y/y	<u>In Mean</u>	1.7039
<u>Log Transformed:</u>	n	<u>In StdDev</u>	0.1907

<u>Parameter Name:</u>	Field pH, S.U.	<u>Background Date Range:</u>	05/11/2016 to 09/25/2017
<u>Alpha Per Test FPR:</u>	0.00174	<u>Option for LT Pts:</u>	0% to <= 15% Substitute ½ PQL
<u>Total Pts</u>	16	<u>Kappa for Selected Verification Plan:</u>	2.179
<u>LT Pts</u>	0	<u>Mean</u>	4.4650
<u>%LT Pts</u>	0	<u>StdDev</u>	0.3692
<u>Normal/Log Normal</u>	y/n	<u>In Mean</u>	1.4928
<u>Log Transformed:</u>	n	<u>In StdDev</u>	0.0886

<u>Parameter Name:</u>	Total Dissolved Solids, mg/L	<u>Background Date Range:</u>	05/11/2016 to 09/25/2017
<u>Alpha Per Test FPR:</u>	0.00174	<u>Option for LT Pts:</u>	0% to <= 15% Substitute ½ PQL
<u>Total Pts</u>	16	<u>Kappa for Selected Verification Plan:</u>	1.968
<u>LT Pts</u>	0	<u>Mean</u>	32.3125
<u>%LT Pts</u>	0	<u>StdDev</u>	6.0632
<u>Normal/Log Normal</u>	y/y	<u>In Mean</u>	3.4598
<u>Log Transformed:</u>	n	<u>In StdDev</u>	0.1810

Wateree Station Parametric Prediction Interval on Background - Background Data Calculation

<u>Number Of Locations:</u>	6	<u>Annual Site Wide False Positive Rate (SWFPR):</u>	0.10
<u>Number Of Parameters:</u>	7	<u>Sample Events per Year:</u>	2
<u>Sampling Plan:</u>	Interwell	<u>Verification Sampling:</u>	Pass 1 of 2 (one resample)



Wateree Station Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 1
Background Date Range: 05/11/2016 to 09/25/2017
Compliance Date Range: 07/05/2017 to 11/14/2017
Compliance Locations: MW-AP-01,MW-AP-02,MW-AP-03,MW-AP-04,MW-AP-05,MW-AP-08
Background Locations: MW-AP-01A,MW-FGD-01

Location MW-AP-01

Run Id: 3

Parameter Name: Chlorides, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	187.000	7.669		y
9/26/2017	195.000	7.669		y

Run Id: 4

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >	Result <	
					<u>Lower Limit</u>	<u>Lower Limit</u>
7/10/2017	6.250	5.270		y	3.660	n
9/26/2017	6.710	5.270		y	3.660	n

Run Id: 7

Parameter Name: Total Dissolved Solids, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	442.000	44.248		y
9/26/2017	473.000	44.248		y

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Wateree Station Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 1
Background Date Range: 05/11/2016 to 09/25/2017
Compliance Date Range: 07/05/2017 to 11/14/2017
Compliance Locations: MW-AP-01,MW-AP-02,MW-AP-03,MW-AP-04,MW-AP-05,MW-AP-08
Background Locations: MW-AP-01A,MW-FGD-01

Location MW-AP-02

Run Id: 10

Parameter Name: Chlorides, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	57.760	7.669		y
9/26/2017	104.000	7.669		y

Run Id: 11

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >	Result <	
					<u>Lower Limit</u>	<u>Lower Limit</u>
7/10/2017	5.990	5.270		y	3.660	n
9/26/2017	6.440	5.270		y	3.660	n

Run Id: 14

Parameter Name: Total Dissolved Solids, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	313.000	44.248		y
9/26/2017	407.000	44.248		y

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Wateree Station Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 1
Background Date Range: 05/11/2016 to 09/25/2017
Compliance Date Range: 07/05/2017 to 11/14/2017
Compliance Locations: MW-AP-01,MW-AP-02,MW-AP-03,MW-AP-04,MW-AP-05,MW-AP-08
Background Locations: MW-AP-01A,MW-FGD-01

Location MW-AP-03

Run Id: 17

Parameter Name: Chlorides, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	57.070	7.669		y
9/26/2017	77.800	7.669		y

Run Id: 18

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >	<u>Lower Limit</u>	<u>Lower Limit</u>	Result <
7/10/2017	6.100	5.270		y	3.660		n
9/26/2017	6.350	5.270		y	3.660		n

Run Id: 21

Parameter Name: Total Dissolved Solids, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	391.000	44.248		y
9/26/2017	402.000	44.248		y

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Wateree Station Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 1
Background Date Range: 05/11/2016 to 09/25/2017
Compliance Date Range: 07/05/2017 to 11/14/2017
Compliance Locations: MW-AP-01,MW-AP-02,MW-AP-03,MW-AP-04,MW-AP-05,MW-AP-08
Background Locations: MW-AP-01A,MW-FGD-01

Location MW-AP-04

Run Id: 24

Parameter Name: Chlorides, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	11.660	7.669		y
9/26/2017	15.800	7.669		y

Run Id: 25

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >	Result <	
					<u>Lower Limit</u>	<u>Lower Limit</u>
7/10/2017	6.260	5.270		y	3.660	n
9/26/2017	6.540	5.270		y	3.660	n

Run Id: 28

Parameter Name: Total Dissolved Solids, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/10/2017	446.000	44.248		y
9/26/2017	389.000	44.248		y

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Wateree Station Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 1
Background Date Range: 05/11/2016 to 09/25/2017
Compliance Date Range: 07/05/2017 to 11/14/2017
Compliance Locations: MW-AP-01,MW-AP-02,MW-AP-03,MW-AP-04,MW-AP-05,MW-AP-08
Background Locations: MW-AP-01A,MW-FGD-01

Location MW-AP-05

Run Id: 31

Parameter Name: Chlorides, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/6/2017	19.740	7.669		y
9/26/2017	19.500	7.669		y

Run Id: 32

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >	<u>Lower Limit</u>	<u>Lower Limit</u>	Result <
7/6/2017	5.990	5.270		y	3.660		n
9/26/2017	6.120	5.270		y	3.660		n

Run Id: 35

Parameter Name: Total Dissolved Solids, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/6/2017	246.000	44.248		y
9/26/2017	279.000	44.248		y

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Wateree Station Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 1
Background Date Range: 05/11/2016 to 09/25/2017
Compliance Date Range: 07/05/2017 to 11/14/2017
Compliance Locations: MW-AP-01,MW-AP-02,MW-AP-03,MW-AP-04,MW-AP-05,MW-AP-08
Background Locations: MW-AP-01A,MW-FGD-01

Location MW-AP-08

Run Id: 38

Parameter Name: Chlorides, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/6/2017	18.450	7.669		y
9/26/2017	18.300	7.669		y

Run Id: 39

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >	Result <	
					<u>Lower Limit</u>	<u>Lower Limit</u>
7/6/2017	5.580	5.270		y	3.660	n
9/26/2017	5.950	5.270		y	3.660	n

Run Id: 42

Parameter Name: Total Dissolved Solids, mg/L

Option for LT Pts (Compliance Data) : 0% to <= 15% Substitute PQL

<u>Sample Date</u>	<u>Analysis Result</u>	<u>Upper Limit</u>	<u>Upper Limit</u>	Result >
7/6/2017	347.000	44.248		y
9/26/2017	374.000	44.248		y

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Wateree Station
Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided:	1
Background Date Range:	05/11/2016 to 09/25/2017
Compliance Date Range:	07/05/2017 to 11/14/2017
Compliance Locations:	MW-AP-01,MW-AP-02,MW-AP-03,MW-AP-04,MW-AP-05,MW-AP-08
Background Locations:	MW-AP-01A,MW-FGD-01

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 1

Location ID: MW-AP-01	Parameter Code: 01022
Confidence Level: 0.95	Parameter: Boron, total
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: > 15% to <= 50% Substitute PQL	Percent of ND: 22

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.495	ug/L per year
Lower Confidence Limit of Slope, M1:	0.257	ug/L per year
Upper Confidence Limit of Slope, M2+1:	0.686	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.726
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 2

Location ID: MW-AP-01	Parameter Code: 00916
Confidence Level: 0.95	Parameter: Calcium, tot
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	14.483	ug/L per year
Lower Confidence Limit of Slope, M1:	10.371	ug/L per year
Upper Confidence Limit of Slope, M2+1:	17.563	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.023
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 3

Location ID: MW-AP-01	Parameter Code: 00940
Confidence Level: 0.95	Parameter: Chlorides
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	54.358	mg/L per year
Lower Confidence Limit of Slope, M1:	41.707	mg/L per year
Upper Confidence Limit of Slope, M2+1:	66.554	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.440
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 4

Location ID: MW-AP-01	Parameter Code: 00400
Confidence Level: 0.95	Parameter: Field pH
Date Range: 05/11/2016 to 09/26/2017	Units: S.U.
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.035	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.406	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.434	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.419
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 5

Location ID: MW-AP-01	Parameter Code: 00951
Confidence Level: 0.95	Parameter: Fluoride, total
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.013	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.021	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.047	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.938
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 6

Location ID: MW-AP-01	Parameter Code: 00945
Confidence Level: 0.95	Parameter: Sulfate, tot
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	3.305	mg/L per year
Lower Confidence Limit of Slope, M1:	-4.771	mg/L per year
Upper Confidence Limit of Slope, M2+1:	8.013	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.839
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 7

Location ID: MW-AP-01	Parameter Code: 00515
Confidence Level: 0.95	Parameter: Total Dissolved Solids
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	90.446	mg/L per year
Lower Confidence Limit of Slope, M1:	62.683	mg/L per year
Upper Confidence Limit of Slope, M2+1:	115.078	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.023
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 8

Location ID: MW-AP-02	Parameter Code: 01022
Confidence Level: 0.95	Parameter: Boron, total
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: > 50% to <= 100 % Substitute PQL	Percent of ND: 56

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.000	ug/L per year
Lower Confidence Limit of Slope, M1:	0.000	ug/L per year
Upper Confidence Limit of Slope, M2+1:	0.058	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.003
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 9

Location ID: MW-AP-02	Parameter Code: 00916
Confidence Level: 0.95	Parameter: Calcium, tot
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-13.323	ug/L per year
Lower Confidence Limit of Slope, M1:	-26.430	ug/L per year
Upper Confidence Limit of Slope, M2+1:	1.577	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.564
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 10

Location ID: MW-AP-02	Parameter Code: 00940
Confidence Level: 0.95	Parameter: Chlorides
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	40.671	mg/L per year
Lower Confidence Limit of Slope, M1:	-15.370	mg/L per year
Upper Confidence Limit of Slope, M2+1:	97.832	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.147
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 11

Location ID: MW-AP-02	Parameter Code: 00400
Confidence Level: 0.95	Parameter: Field pH
Date Range: 05/11/2016 to 09/26/2017	Units: S.U.
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.059	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.856	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.411	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.313
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 12

Location ID: MW-AP-02

Parameter Code: 00951

Confidence Level: 0.95

Parameter: Fluoride, total

Date Range: 05/11/2016 to 09/26/2017

Units: mg/L

Option for LT Points: 0% to <= 15% Substitute PQL

Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.030	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.151	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.172	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.210
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 13

Location ID: MW-AP-02	Parameter Code: 00945
Confidence Level: 0.95	Parameter: Sulfate, tot
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-25.195	mg/L per year
Lower Confidence Limit of Slope, M1:	-44.973	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.392	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.564
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 14

Location ID: MW-AP-02	Parameter Code: 00515
Confidence Level: 0.95	Parameter: Total Dissolved Solids
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-5.530	mg/L per year
Lower Confidence Limit of Slope, M1:	-59.929	mg/L per year
Upper Confidence Limit of Slope, M2+1:	83.994	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.000
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 15

Location ID: MW-AP-03	Parameter Code: 01022
Confidence Level: 0.95	Parameter: Boron, total
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: > 15% to <= 50% Substitute PQL	Percent of ND: 22

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.016	ug/L per year
Lower Confidence Limit of Slope, M1:	-0.104	ug/L per year
Upper Confidence Limit of Slope, M2+1:	0.033	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.767
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 16

Location ID: MW-AP-03	Parameter Code: 00916
Confidence Level: 0.95	Parameter: Calcium, tot
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	9.335	ug/L per year
Lower Confidence Limit of Slope, M1:	-15.943	ug/L per year
Upper Confidence Limit of Slope, M2+1:	25.334	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.839
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 17

Location ID: MW-AP-03	Parameter Code: 00940
Confidence Level: 0.95	Parameter: Chlorides
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	40.811	mg/L per year
Lower Confidence Limit of Slope, M1:	11.376	mg/L per year
Upper Confidence Limit of Slope, M2+1:	70.894	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.815
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 18

Location ID: MW-AP-03	Parameter Code: 00400
Confidence Level: 0.95	Parameter: Field pH
Date Range: 05/11/2016 to 09/26/2017	Units: S.U.
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.072	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.763	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.532	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.419
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 19

Location ID: MW-AP-03

Parameter Code: 00951

Confidence Level: 0.95

Parameter: Fluoride, total

Date Range: 05/11/2016 to 09/26/2017

Units: mg/L

Option for LT Points: 0% to <= 15% Substitute PQL

Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.162	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.354	mg/L per year
Upper Confidence Limit of Slope, M2+1:	-0.032	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.772
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 20

Location ID: MW-AP-03	Parameter Code: 00945
Confidence Level: 0.95	Parameter: Sulfate, tot
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	6.914	mg/L per year
Lower Confidence Limit of Slope, M1:	-20.677	mg/L per year
Upper Confidence Limit of Slope, M2+1:	42.817	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.147
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 21

Location ID: MW-AP-03	Parameter Code: 00515
Confidence Level: 0.95	Parameter: Total Dissolved Solids
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	69.455	mg/L per year
Lower Confidence Limit of Slope, M1:	20.218	mg/L per year
Upper Confidence Limit of Slope, M2+1:	135.093	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.981
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 22

Location ID: MW-AP-04	Parameter Code: 01022
Confidence Level: 0.95	Parameter: Boron, total
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 11

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.197	ug/L per year
Lower Confidence Limit of Slope, M1:	-1.379	ug/L per year
Upper Confidence Limit of Slope, M2+1:	0.932	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.104
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 23

Location ID: MW-AP-04	Parameter Code: 00916
Confidence Level: 0.95	Parameter: Calcium, tot
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-5.645	ug/L per year
Lower Confidence Limit of Slope, M1:	-22.296	ug/L per year
Upper Confidence Limit of Slope, M2+1:	19.521	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.313
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 24

Location ID: MW-AP-04	Parameter Code: 00940
Confidence Level: 0.95	Parameter: Chlorides
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-4.418	mg/L per year
Lower Confidence Limit of Slope, M1:	-8.743	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.029	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.468
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 25

Location ID: MW-AP-04	Parameter Code: 00400
Confidence Level: 0.95	Parameter: Field pH
Date Range: 05/11/2016 to 09/26/2017	Units: S.U.
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.143	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.406	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.706	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.521
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 26

Location ID: MW-AP-04

Parameter Code: 00951

Confidence Level: 0.95

Parameter: Fluoride, total

Date Range: 05/11/2016 to 09/26/2017

Units: mg/L

Option for LT Points: 0% to <= 15% Substitute PQL

Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.069	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.202	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.016	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.355
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 27

Location ID: MW-AP-04	Parameter Code: 00945
Confidence Level: 0.95	Parameter: Sulfate, tot
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: > 50% to <= 100 % Substitute PQL	Percent of ND: 67

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.636	mg/L per year
Lower Confidence Limit of Slope, M1:	-1.411	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.000	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.413
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 28

Location ID: MW-AP-04	Parameter Code: 00515
Confidence Level: 0.95	Parameter: Total Dissolved Solids
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	22.015	mg/L per year
Lower Confidence Limit of Slope, M1:	-52.614	mg/L per year
Upper Confidence Limit of Slope, M2+1:	51.555	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.629
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 29

Location ID: MW-AP-05	Parameter Code: 01022
Confidence Level: 0.95	Parameter: Boron, total
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: > 50% to <= 100 % Substitute PQL	Percent of ND: 100

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.000	ug/L per year
Lower Confidence Limit of Slope, M1:	0.000	ug/L per year
Upper Confidence Limit of Slope, M2+1:	0.000	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.000
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 30

Location ID: MW-AP-05	Parameter Code: 00916
Confidence Level: 0.95	Parameter: Calcium, tot
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.472	ug/L per year
Lower Confidence Limit of Slope, M1:	-1.296	ug/L per year
Upper Confidence Limit of Slope, M2+1:	0.297	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.949
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 31

Location ID: MW-AP-05	Parameter Code: 00940
Confidence Level: 0.95	Parameter: Chlorides
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.358	mg/L per year
Lower Confidence Limit of Slope, M1:	-1.054	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.237	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.419
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 32

Location ID: MW-AP-05	Parameter Code: 00400
Confidence Level: 0.95	Parameter: Field pH
Date Range: 05/11/2016 to 09/26/2017	Units: S.U.
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.056	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.681	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.565	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.104
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 33

Location ID: MW-AP-05

Parameter Code: 00951

Confidence Level: 0.95

Parameter: Fluoride, total

Date Range: 05/11/2016 to 09/26/2017

Units: mg/L

Option for LT Points: > 50% to <= 100 % Substitute PQL

Percent of ND: 100

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.000	mg/L per year
Lower Confidence Limit of Slope, M1:	0.000	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.000	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.000
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 34

Location ID: MW-AP-05	Parameter Code: 00945
Confidence Level: 0.95	Parameter: Sulfate, tot
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: > 15% to <= 50% Substitute PQL	Percent of ND: 33

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-4.504	mg/L per year
Lower Confidence Limit of Slope, M1:	-10.937	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.895	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.048
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 35

Location ID: MW-AP-05	Parameter Code: 00515
Confidence Level: 0.95	Parameter: Total Dissolved Solids
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	9.517	mg/L per year
Lower Confidence Limit of Slope, M1:	-40.423	mg/L per year
Upper Confidence Limit of Slope, M2+1:	40.068	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.313
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 36

Location ID: MW-AP-08	Parameter Code: 01022
Confidence Level: 0.95	Parameter: Boron, total
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: > 50% to <= 100 % Substitute PQL	Percent of ND: 100

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.000	ug/L per year
Lower Confidence Limit of Slope, M1:	0.000	ug/L per year
Upper Confidence Limit of Slope, M2+1:	0.000	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.000
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 37

Location ID: MW-AP-08	Parameter Code: 00916
Confidence Level: 0.95	Parameter: Calcium, tot
Date Range: 05/11/2016 to 09/26/2017	Units: ug/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.296	ug/L per year
Lower Confidence Limit of Slope, M1:	-2.586	ug/L per year
Upper Confidence Limit of Slope, M2+1:	3.714	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.521
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 38

Location ID: MW-AP-08

Parameter Code: 00940

Confidence Level: 0.95

Parameter: Chlorides

Date Range: 05/11/2016 to 09/26/2017

Units: mg/L

Option for LT Points: 0% to <= 15% Substitute PQL

Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.159	mg/L per year
Lower Confidence Limit of Slope, M1:	-2.225	mg/L per year
Upper Confidence Limit of Slope, M2+1:	2.202	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.104
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 39

Location ID: MW-AP-08	Parameter Code: 00400
Confidence Level: 0.95	Parameter: Field pH
Date Range: 05/11/2016 to 09/26/2017	Units: S.U.
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.114	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.462	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.110	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.938
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 40

Location ID: MW-AP-08

Parameter Code: 00951

Confidence Level: 0.95

Parameter: Fluoride, total

Date Range: 05/11/2016 to 09/26/2017

Units: mg/L

Option for LT Points: 0% to <= 15% Substitute PQL

Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.074	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.153	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.029	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.355
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 41

Location ID: MW-AP-08	Parameter Code: 00945
Confidence Level: 0.95	Parameter: Sulfate, tot
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 11

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-3.752	mg/L per year
Lower Confidence Limit of Slope, M1:	-32.138	mg/L per year
Upper Confidence Limit of Slope, M2+1:	99.444	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.313
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 42

Location ID: MW-AP-08	Parameter Code: 00515
Confidence Level: 0.95	Parameter: Total Dissolved Solids
Date Range: 05/11/2016 to 09/26/2017	Units: mg/L
Option for LT Points: 0% to <= 15% Substitute PQL	Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-9.168	mg/L per year
Lower Confidence Limit of Slope, M1:	-35.882	mg/L per year
Upper Confidence Limit of Slope, M2+1:	11.562	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.355
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Wateree Station
Theil Sen Mann-Kendall Trend Analysis