Nautilus Geologic Consulting, PLLC

2020 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

EPA CCR RULE COMPLIANCE

DOMINION ENERGY SOUTH CAROLINA:
Cope Station: Class Three Landfill

January 2021

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Table of Contents

EXECUTIVE SUMMARY

This document presents the *2020 Annual Groundwater Monitoring and Corrective Action* report for the Class 3 landfill at Dominion Energy South Carolina (DESC) Cope Generating Station in Cope, Orangeburg County, South Carolina in accordance with 40 CFR Part 257.90 (e). The Class 3 landfill is a coal combustion residuals (CCR) existing landfill as defined by the US Environmental Protection Agency (EPA) CCR Rule (40 CFR Part 257.53). Pursuant to the CCR Rule (40 CFR Part 257.50 *et. seq.*), DESC is required to complete an *Annual Groundwater Monitoring and Corrective Action Report* by January 31st annually.

This report documents the status of the groundwater monitoring program for the Class 3 landfill, summarizes key activities completed during 2020 and any issues encountered, actions taken to resolve any identified issues, and lists key activities to be completed in 2021. The following is a summary of the current status of groundwater monitoring and corrective action for the Class 3 landfill.

1. At the start and end of the current annual reporting period (2020), the Class 3 landfill was operating under the Detection Monitoring program under 40 CFR Part 257.94.
2. Detection monitoring was conducted at the site in March and September 2020 pursuant to 40 CFR Part 257.94.
3. No statistically significant increases over background concentrations were observed for any of the constituents listed in Appendix III of the CCR Rule for either the March or September 2020 Detection Monitoring events.
4. Based on the results of the 2020 Detection Monitoring events, the Class 3 landfill will remain in Detection Monitoring in 2021.

1.0 INTRODUCTION

This document presents the *2020 Annual Groundwater Monitoring and Corrective Action* report for the Class 3 landfill at Dominion Energy South Carolina (DESC) Cope Generating Station in Cope, Orangeburg County, South Carolina in accordance with 40 CFR Part 257.90 (e). The Class 3 landfill is a coal combustion residuals (CCR) existing landfill as defined by the US Environmental Protection Agency (EPA) CCR Rule (40 CFR Part 257.53).

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

1. A facility map (aerial image) showing the Class 3 landfill and all background (or upgradient) and downgradient monitoring wells, including the well identification numbers, that are part of the groundwater monitoring program for the landfill;
2. 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 from 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;
3. 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
4. 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

Six Type II groundwater monitoring wells (designated MW-LF-01 through MW-LF-06) were installed and developed at Cope Station Class Three Landfill in March 2016 to serve as EPA CCR Rule Compliance monitoring wells. In addition, two existing monitoring wells which are also used for NPDES and South Carolina Department of Health and Environmental Control (SCDHEC) landfill groundwater monitoring compliance, were incorporated in the system network. The existing wells (MW-06 and MW-16) are designated MW-BG-06 and MW-BG-16 in the CCR groundwater monitoring network. In addition, two Alternate Source Demonstration (ASD) monitoring wells were installed in November 2017 to determine if a source other than the Class 3 Landfill was responsible for statistically significant increases (SSIs) observed for certain EPA CCR Rule Appendix III constituents in groundwater at the compliance monitoring wells based on the results of Detection Monitoring conducted in September and October 2017. The ASD monitoring wells are designated AS-LF-01 and AS-LF-02. The results of the ASD are presented in the August 2018 *Alternate Source Demonstration Report, Cope Station Class 3 Landfill*. The results of the ASD support the position that the SSIs in groundwater evident from statistical analysis of groundwater quality data collected during the September and October 2017 Detection Monitoring event are not due to a release from the Class 3 landfill at the site, and therefore, no further action was warranted. In addition, no SSIs have occurred for any parameters since the September/October 2017 Detection Monitoring event and the Class 3 landfill has remained in detection monitoring since that time. A site location map for Cope Station is presented as **Figure 1** and the locations and designations of the EPA CCR Rule Compliance monitoring wells and other relevant site features are presented in **Figure 2**.

The eight Type II groundwater monitoring wells were installed to monitor groundwater quality in the vicinity of the Class Three landfill in compliance with the groundwater monitoring requirements of the US EPA CCR Rule (40 CFR Parts 257.93 and 257.94(e)(2)). The locations and designations of the monitoring wells are shown in **Figure 2**. Monitoring wells MW-LF-01, AS-LF-01 and AS-LF-02 serve as up-gradient wells to monitor the quality of background groundwater in the surficial aquifer entering the area of the Class Three landfill (existing wells MW-BG-6 and MW-BG-16 are also used as background monitoring locations). The remaining monitoring wells (MW-LF-02 through MWLF-06) serve as down gradient wells to monitor the quality of groundwater down gradient of the Class Three landfill. In addition, existing groundwater monitoring

well MW-40 served as an additional ASD monitoring well to provide groundwater quality data in support of the ASD evaluation referenced above.

3.0 GROUNDWATER MONITORING

3.1 Groundwater Sampling

In accordance with 40 CFR Part 257.94, the sixth round of Detection Monitoring was conducted in March 2020 and included groundwater sampling from monitoring wells MW-LF-01 through MW-LF-06, MW-BG-06, MW-BG-16, AS-LF-01 and AS-LF-02. 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 March 2020 were analyzed by South Carolina Certified laboratories (DESC Central Laboratory (Certification Number 32006) and GEL Laboratories, LLC (Certification Numbers 10120001 and 10120002) for the constituents listed in Appendix III of the EPA CCR Rule (40 CFR Parts 257.50 through 257.107). In addition, all groundwater samples were analyzed for total alkalinity, iron, magnesium, potassium and sodium.

In accordance with 40 CFR Part 257.94, the seventh round of Detection Monitoring was conducted in September 2020 and included groundwater sampling from monitoring wells MW-LF-01 through MW-LF-06, MW-BG-06, MW-BG-16, AS-LF-01 and AS-LF-02. 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 2020 were analyzed by South Carolina Certified laboratories (DESC 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).

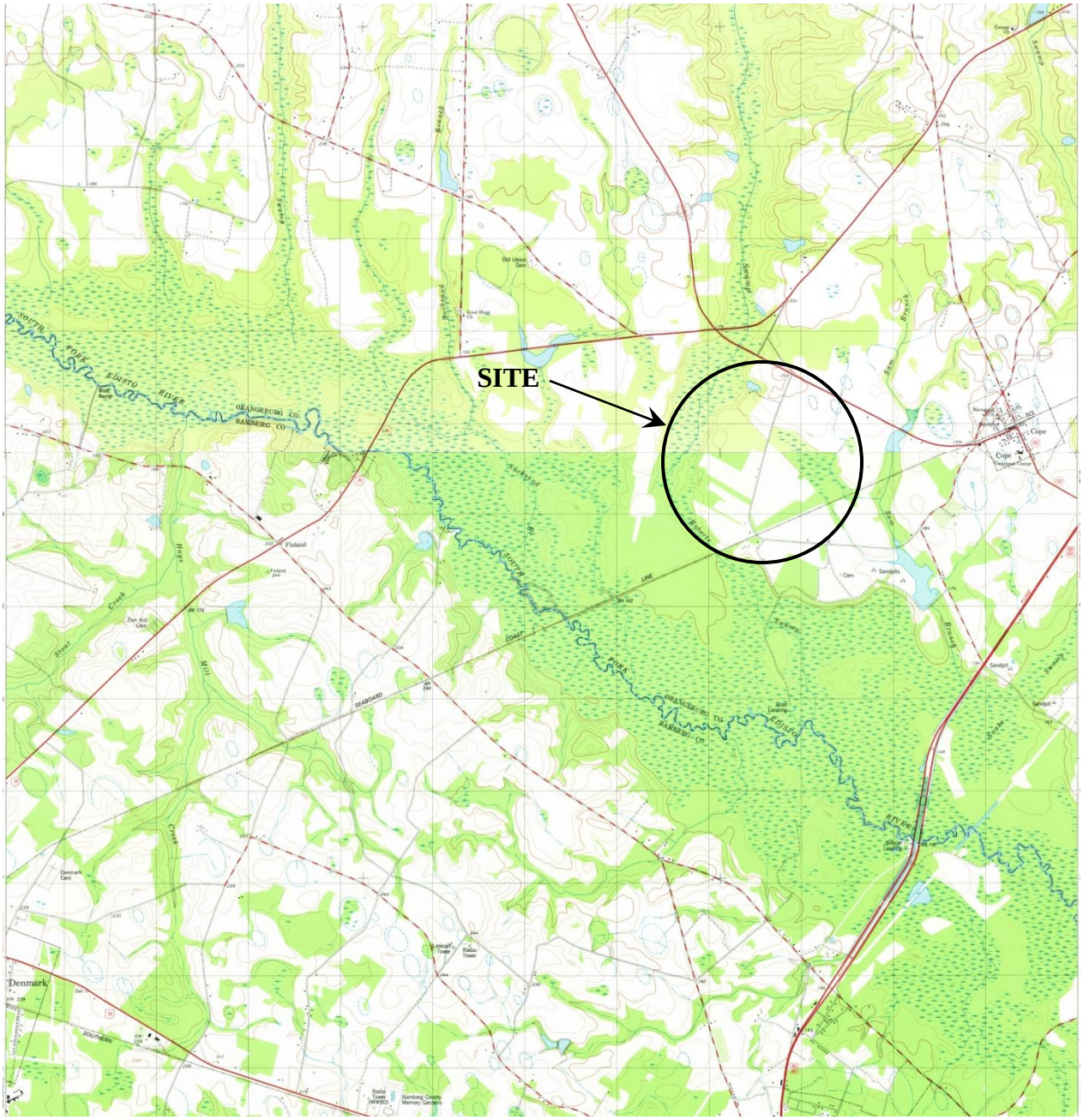
3.2 Results of Field and Laboratory Analyses of Groundwater Samples

The results of the field and laboratory analyses of the groundwater samples collected from the monitoring wells since May 2016 are presented in **Table** 1, and copies of laboratory data sheets for the groundwater samples collected during the Detection Monitoring events conducted in March and September 2020 are presented in **Appendix A**. The results of the statistical analyses performed by DESC of data from the Detection Monitoring events conducted in March and September 2020 indicate that the concentrations of the monitoring parameters detected in groundwater were all within acceptable statistical limits (i.e., no statistically significant increases over background concentrations were observed) for each constituent and no exceedances of applicable EPA Maximum Contaminant Levels (MCLs) were observed. The results of the

groundwater quality data from the March and September 2020 Detection Monitoring events are presented in **Appendix B**.

4.0 KEY PROJECT ACTIVITIES FOR 2021

Detection monitoring will continue in 2021. Two rounds of detection monitoring are anticipated to be completed during March and September 2021 with groundwater samples being collected from monitoring wells MW-LF-01 through MW-LF-06, MW-BG-06, MW-BG-16, AS-LF-01, AS-LF-02 and MW-40.



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Source: USGS 7.5' Topographic Quadrangle Series
Bamberg and Norway East, SC 1979

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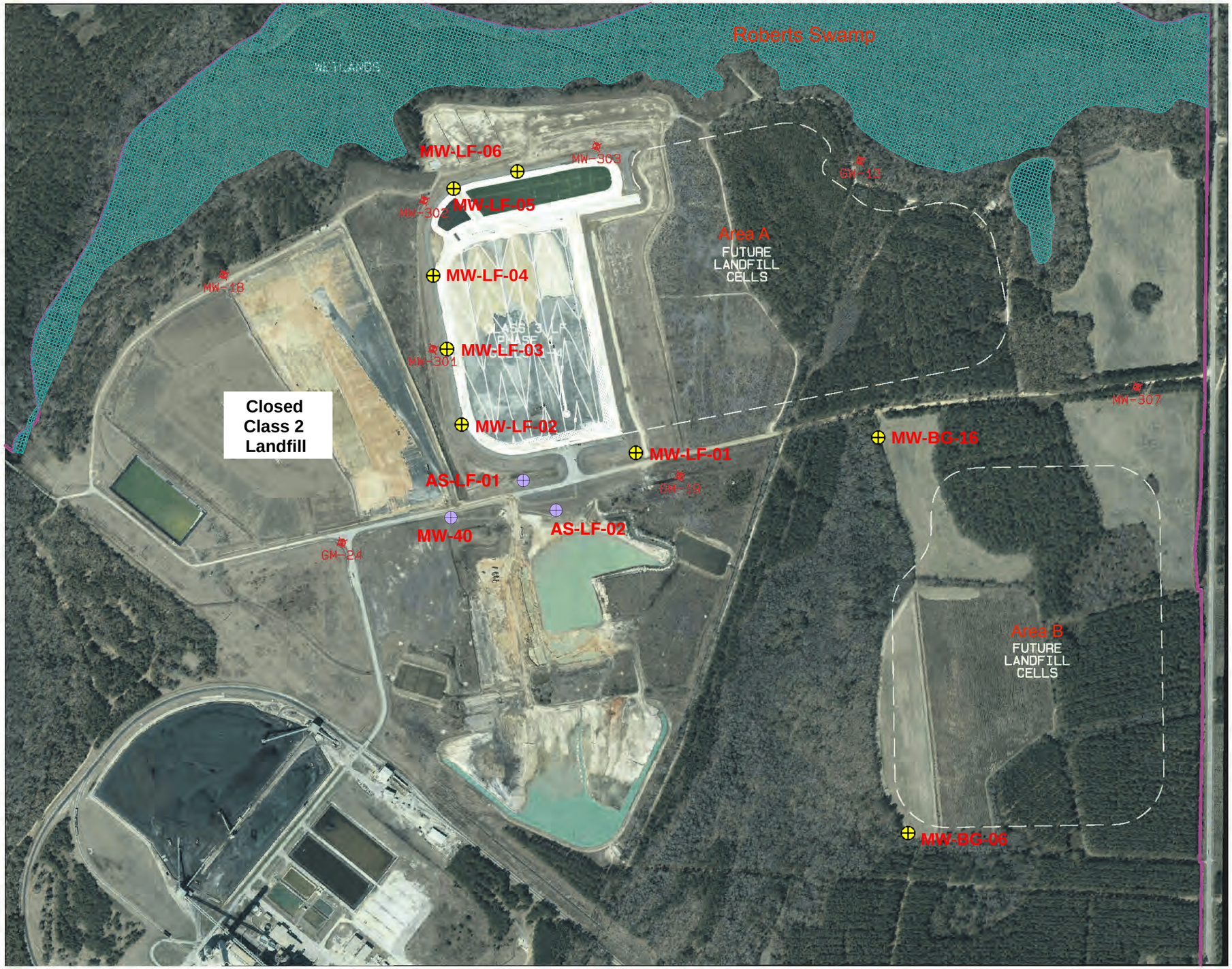
SITE LOCATION MAP

DESC Cope Generating Station

Orangeburg County, South Carolina

Drawn by:	Reviewed by	Project #:	Drawing #:	Figure No.
USGS		Scale: 1:24,000	Drawing Date: 10/7/11	1



1. PHASE 1 LANDFILL GRADES SHOWN THIS SHEET REPRESENT TOP OF LINER GRADES
2. ORTHOPHOTOGRAPH DATED MARCH 2015

LF-1 Class Three Landfill Monitoring Well for EPA CCR Rule Compliance

AS-LF-01 Alternate Source Demonstration Monitoring Well

GRAPHIC SCALE 1"=600'

0 600 1200

REVISION	DATE
1)	
2)	
3)	
4)	

Nautilus Geologic Consulting, PLLC

COPE STATION CLASS THREE LANDFILL

EPA CCR Rule Compliance Monitoring Wells

JOB NUMBER

SHEET 2

V:\SCE66\Cope\Class 3 LF PH1 Construction\Groundwater Monitoring\Cope Class 3 LF - GWMP.pro Tue Aug 4, 2015 5:11:55PM

TABLE 1
RESULTS OF FIELD AND LABORATORY ANALYSES OF GROUNDWATER SAMPLES
EPA CCR RULE BACKGROUND AND COMPLIANCE GROUNDWATER MONITORING WELLS
Cope Generating Station Class 3 Landfill
Cope, Orangeburg County, South Carolina

	Groundwater Monitoring Indicator Parameters						40 CFR Part 257 Appendix III Detection Monitoring Parameters								40 CFR Part 257 Appendix IV Assessment Monitoring Constituents															
	Groundwater Elevation ft	ORP mV	DO mg/L	Specific conductance u mhos/cm	Temperature degrees C	Turbidity NTU 10	pH (lab) S.U. BG	pH (field) S.U. BG	Boron ug/L BG	Calcium ug/L BG	Chloride mg/L BG	Fluoride mg/L 4 mg/L	Sulfate mg/L BG	TDS mg/L BG	Antimony ug/L 6 ug/L	Arsenic ug/L 10 ug/L	Barium ug/L 2000 ug/L	Beryllium ug/L 4 ug/L	Cadmium ug/L 5 ug/L	Chromium ug/L 100 ug/L	Cobalt ug/L BG	Lead ug/L 15 ug/L	Lithium ug/L BG	Mercury ug/L 2 ug/L	Molybdenum ug/L BG	Radium 226 pCi/L 5 pCi/L	Radium 228 pCi/L 5 pCi/L	Radium 226 + 228 pCi/L 5 pCi/L	Selenium ug/L 50 ug/L	Thallium ug/L 2 ug/L
Cope Landfill																														
MW-LF-01																														
5/12/16	168.85	93.8	0.98	101	21.4	4.56		5.4	<1,000	4,840	13.7	0.0679	2.72	72	<1.00	<1.00	56.6	<1.00	<1.00	<1.00	4.1	<1.00	<2.00	<0.2	<5.00	0.624	1.37	1.994	<5.00	<1.00
7/14/16	167.59	228	0.8	92	28.8	26.6	5.49	4.2	<1,000	3,770	19	0.14	1.9	56	<1.00	<1.00	56	<1.00	<1.00	<1.00	5.1	<1.00	<2.00	<0.2	<10.0	1.21	1.57	2.78	<5.00	<1.00
9/14/16	168.28	259	4.41	65	27.3	6.2		5	<1,000	2,350	6.67	<0.033	0.69	24	<1.00	<1.00	38.8	<2.00	<1.00	<1.00	1.3	<1.00	<2.00	<0.2	<5.00	1.17	1.6	2.77	<5.00	<1.00
11/8/16	167.93	273	5.74	70	24.5	4.51		4.2	<1,000	2,632	11.23	0.0548	0.63	30	<1.00	<1.00	40.4	<2.00	<1.00	<1.00	1.1	<1.00	<2.00	<0.2	<1.00	1.31	2.72	4.03	<5.00	<1.00
1/25/17	170.46	149	5.2	49	18.5	7.37	6.09	5.4	<1,000	2,002	7.92	0.044	<0.5	130	<1.00	<1.00	34.2	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	<0.398	2.06	2.06	<5.00	<1.00
3/29/17	169.33	316	5.2	58	19.7	1.56	4.84	4.6	<1,000	2,805	12.48	0.0865	<0.5	41	<1.00	<1.00	43.3	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.404	<1.71	0.404	<5.00	<1.00
5/15/17	169.57	82	7.31	81	22.3	6.17	4.79	4.4	<1,000	2,664	10.87	0.0364	<0.5	45	<1.00	<1.00	41	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.628	1.28	1.908	<5.00	<1.00
7/27/17	167.01	132	3.49	111	23.9	5.21	4.91	4.2	<1,000	2,467	16.03	0.0624	<0.5	70	<1.00	<1.00	40.8	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.397	1.68	2.077	<5.00	<1.00
9/25/17	166.73	217	2.81	49	26.1	8.23	5.94	4.8	<1,000	1,818	9.06	<0.033	<0.5	32																
10/12/17	165.90	193	4.47	44	24.9	6.95		4.6		1,830	8.42		<0.5																	
10/30/17	166.22	245	4.29	44	24.3	6.14		4.5		2,030	9.78		<0.5																	
12/11/17	167.40	239	5.28	43	20.2	6.51	6.2	4.4	<1,000	1,877	6.77	<0.033	<0.5	86	<1.00	<1.00	32.6	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
12/19/17	167.60	222	4.45	48	20.3	5.98	4.41	4.6	<1,000	1,904	7.99		<0.5	10	<1.00	<1.00	33.6	<2.00	<1.00	<5.00	<1.00	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
12/28/17	168.17	273.5	4.66	45	17.64	5	4.72	5	<1,000	1,987	7.19	<0.2	<0.5	31	<1.00	<1.00	34.5	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
2/21/18	168.12	112	6.81	57	17.1	4.58		5.8	<200	2,370	9.76	<0.2	<0.5	52	<1.00	<1.00	35.5	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
3/21/18	167.92	156	6.17	43	16.2	6.45	5.11	4.6	<1,000	1,930	7.14	<0.033	<0.5	23																
9/17/18	168.20	295.95	4.69	79.8	26.69	9.21	5.4	4.3	<21.90	2,560	15.4	<0.025	0.75	41																
3/20/19	170.52	343	4.89	64.8	16.7	5.51	5.6	4.7	<38.458	2,750	13.2	<0.008	<0.129	46									<0.758							
9/20/19	166.53	373	2.36	96.5	25.2	3.02		4.4																						
3/16/20	171.55	396	5.09	51.4	17	8.72	5.23	4.6	54.50 J	2,420	9.21	<0.10	<0.50	39																
9/21/20	168.44	354	4.26	45.9	24.8	6.27	4.77	4.1	<200	1,760	7.04	<0.10	<0.50	36																
MW-LF-02																														
5/12/16	164.70	127	1.19	175	23.8	3.21		5.1	<1,000	4,900	41.8	0.131	1.81	89	<1.00	<1.00	139	<1.00	<1.00	<1.00	16.3	<1.00	<2.00	<0.2	<5.00	7.16	3.14	10.3	<5.00	<1.00
7/14/16	163.78	295	1.06	132	24.7	29	5.68	2.8	<1,000	3,400	32	0.196	3.1	49	<1.00	<1.00	111	<1.00	<1.00	<1.00	8	<1.00	<2.00	<0.2	<10.0	1.51	1.98	3.49	<5.00	<1.00
9/14/16	164.68	346	1.81	142	26.1	5.21		4.4	<1,000	3,420	27	0.0943	3.25	56	<1.00	<1.00	83.4	<2.00	<1.00	<1.00	2.5	<1.00	<2.00	<0.2	<5.00	1.44	2.7	3.14	<5.00	<1.00
11/8/16	163.40	329	3.83	141	25.2	6.14		3.9	<1,000	3,000	27.06	0.12	2.63	54	<1.00	<1.00	80.2	<2.00	<1.00	1.7	3.2	1.1	<2.00	<0.2	<1.00	1.29	3.21	4.5	<5.00	<1.00
1/25/17	166.26	192	2.23	125	22.8	7.59	4.41	4.4	<1,000	2,787	26.16	0.118	3.82	52	<1.00	<1.00	60.8	<2.00	<1.00	1	1.3	<1.00	<2.00	<0.2	<1.00	1.9	4.24	6.14	<5.00	<1.00
3/29/17	164.47	358	1.06	158	23.1	7.05	4.3	4.1	<1,000	3,673	33.5	0.126	1.86	72	<1.00	<1.00	93.6	<2.00	<1.00	1	3	<1.00	<2.00	<0.2	<1.00	1.58	<1.79	1.58	<5.00	<1.00
5/15/17	165.20	72.4	6.01	164	22.6	6.05	4.38	4	<1,000	3,727	28.9	0.121	1.73	70	<1.00	<1.00	83	<2.00	<1.00	<1.00	1.7	<1.00	<2.00	<0.2	<1.00	1.73	4.01	5.74	<5.00	<1.00
7/27/17	163.22	240	1.45	155	22.3	7.82	5.09	4	<1,000	3,349	28.42	0.124	2.62	82	<1.00	<1.00	94.8	<2.00	<1.00	<1.00	3.2	<1.00	<2.00	<0.2	<1.00	1.47	3.76	5.23	<5.00	<1.00
9/25/17	163.08	278	1.17	135	25.4	7.77	4.47	4.3	<1,000	3,344	24	0.104	2.8	61																
10/12/17	162.27	270	1.5	122	23.3	5.78		4.2		3,280	25.1		2.5																	
10/30/17	162.73	296	1.45	125	22.9	6.17		4.2		3,422	25.9		2.73																	
12/11/17	164.08	227	1.69	124	22.2	5.74	4.66	4.1	<1,000	3,269	23.5	0.144	3.41	68	<1.00	<1.00	75.8	<2.00	<1.00	<1.00	1.2	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
12/19/17	163.46	263	1.3	148	23.4	6.09	4.45	4.1	<1,000	3,566	29		3.92	59	<1.00	<1.00	79.9	<2.00	<1.00	<5.00	1.4	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
12/28/17	163.43	304.8	1.19	140	20.77	2.9	4.22	4.5	<1,000	3,496	26.8	<0.2	3.69	69	<1.00	<1.00	78.8	<2.00	<1.00	<1.00	1.31	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
2/21/18	163.26	283	1.84	134	21.6	4.69		4.7	<200	4,070	27.1	<0.2	3.28	68	<1.00	<1.00	78.3	<1.00	<1.00	<1.00	1.5	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
3/21/18	162.86	198	1.01	151	18.9	6.36	4.62	4.3	<1,000	4,020	32.9	0.188	2.61	55																
9/18/18	164.54	331.99	1.5	134.92	25.32	4.81	5.24	3.96	<21.90	3,280	25	<0.025	4.08	60																
3/20/19	166.55	361	1.38	140	20.1	8.66	5.22	4.3	<38.458	3,670	28.6	<0.008	4.07	98									1							
9/19/19	163.78	367	0.77	151	24.3	7.17		4																						
3/16/20	168.41	429	1.28	145	19.7	8.15	4.66	4.3	<200	4,570	28.9	<0.10	4.06	93																
9/21/20	166.34	393	1.48	147	22.6	6.28	4.39	3.8	85.60	3,900	31.4	<0.10	4.48	96																
MW-LF-03																														
5/12/16	163.85	90.4	3.62	33	23.3	2.71		5.4	<1,000	2,130	3.97	<0.033	1.405	23.5	<1.00	<1.00	42.75	<1.00	<1.00	<1.00	2.15	<1.00	<2.00	<0.2	<5.00	1.285	1.0165	2.3015	<5.00	<1.00
7/14/16	162.66	196	1.61	30	24.7	13.6	6.08	4.1	<1,000	1,470	3.3	<0.033	<0.5	17	<1.00	<1.00	31.7	<1.00	<1.00	<1.00	2.4	<1.00	<2.00	<0.2	<10.0	1.3	0.522	1.822	<5.00	<1.00
9/14/16	163.59	339	2.12	32	26.7	5.59		4.5	<1,000	883	3.18	<0.033	<0.5	25	<1.00	<1.00	25.3	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<5.00	<0.317	<2.27	<2.587	<5.00	<1.00
11/8/16	162.58	323	3.62	33	25.1	4.09		4.1	<1,000	842	3.19	0.0505	<0.5	21	<1.00	<1.00	23.8	<2.00	<1.00	<1.00	1.1	1.2	<2.00	<0.2	<1.00	0.861	2.33	3.191	<5.00	<1.00
1/25/17	164.41	182	3.18	31	22.5	7.5	5.23	4.9	<1,000	761	3.34	0.0615	<0.5	21	<1.00	<1.00	24.5	<2.00	<1.00	<1.00	<1.00	<1.00	2	<0.2	<1.00	0.791	<1.17	0.791	<5.00	<1.00
3/30/17	163.20	285	2.34	29	21.1	0.38	4.8	4.6	<1,000	1,005	3.75	0.0754	<0.5	32	<1.00	<1.00	33.4	<2.00	<1.00	<1.00	1.35	<1.00	2	<0.2	<1.00	0.685	<1.76	0.685	<5.00	<1.00
5/15/17	163.94	64.8	3.69	33	23.1	5.72	4.93	4.2	<1,000	934	3.26	<0.033	<0.5	25	<1.00	<1.00	28.2	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.566	<1.31	0.566	<5.00	<1.00
7/27/17	161.86	228	1.68	39	22.6	5.81	4.89	4.2	<1,000	823	3.44	<0.033	<0.5	29	<1.00	<1.00	29.6	<1.00	<1.00	<1.00	1.2	<1.00	<2.00	<0.2	<1.00	0.626	<2.41	0.626	<5.00	<1.00
9/25/17	161.51	290	1.91	32	25.1	6.15		4.4	<1,000	724	3.42	<0.033	<0.5	19																
10/12/17	160.88	228	1.91	31	24.4	6.42		4.4		742	3.82		<0.5																	
10/30/17	161.05	276	1.52	31	23.8	5.99		4.4		860	3.7		<0.5																	
3/21/18	161.33	194	1.75	32	19.5	5.76	4.96	4.5	<1,000	838	4.12	0.0389 J	<0.5	19																
9/18/18	163.23	185.22	0.75	36.76	27.23	4	5.45	4.58	<21.90	802	3.23	<0.025	0.55	21																
3/20/19	164.89	335	1.58	35.6	20	5.89	5.59	4.8	<38.458	1,030	3.53	<0.008	0.76	25									2.4							
9/19/19	161.84	364	0.99	33.4	25.1	6.17		4.2																						
3/16/20	167.44	334	2.52	53.8	20.3	6.14	5.42	5	<200	1,180	3.38	<0.10	4.2	46																
9/21/20	163.75	374	2.62	35.6	23.5	5.74	4.78	4	41.40	1,140	3.26	<0.10	<0.5	35																
MW-LF-04																														
5/12/16	160.91	120	4.43	35	24.6	4.91		4.8	<1,000	1,130	2.86	0.0498	0.63	5	<1.00	<1.00	10.6	<1.00	<1.00	<1.00	1.9	<1.00	<2.00	<0.2	<5.00	0.94	0.918	1.858	<5.00	<1.00
7/14/16	159.89	172	3.17	39	27.2	62	5.87	4.1	<1,000	1,040	2.9	<0.033	0.83	20	<1.00	<1.00	10	<1.00	<1.00	<1.00	1.2	<1.00	<2.00	<0.2	<10.0	3.81	0.383	4.193	<5.00	<1.00
9/14/16	160.17	377	3.66	47	24.4	8.33		4.1	<1,000	1,700	4.32	<0.033	<0.5	32	<1.00	<1.00	19.8	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<5.00	1.1	<2.05	1.1	<5.00	<1.00
11/8/16	160.17	350	5.65	48	24.8	7.18		3.9	<1,000	1,239	3.52	<0.033	<0.5	17	<1.00	<1.00	15.4	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	<0.362	<2.14	<2.502	<5.00	<1.00
1/25/17	161.42	215	4.19	41	22.6	8.49	4.72	4.7	<1,000	1,385	4.13	<0.033	<0.5	17	<1.00	<1.00	18.9	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.874	<1.59	0.874	<5.00	<1.00
3/30/17	160.71	297	4.38	37	21.9	27.9	4.67	4.5	<1,000	1,147	3.37	0.0501	<0.5	21	<1.00	<1.00	13.9	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	1.14	<1.78	1.14	<5.00	<1.00
5/15/17	161.02	70.8	4.63	44	22.6	7.46	4.79	4.1	<1,000	1,281	3.37	<0.033	<0.5	28	<1.00	<1.00	10	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.476	<1.54	0.476	<5.00	<1.00
7/27/17	159.34	177	4.31	55	22.1	7.15	4.73	4.3	<1,000	1,100	3.74	<0.033	<0.5	41	<1.00	<1.00	12.8	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.623	1.66	2.283	<5.00	<1.00
9/25/17	158.76	299	3.19	49	24.8	7.63	4.84	4.3	<1,000	1,576	4.78	<0.033	<0.5	31																
10/12/17	158.34	227	4.48	44	23.9	6.45		4.4		1,600	4.69		<0.5																	
10/30/17	158.33	262	4.4	45	23.9	7.51		4.4		1,685	4.89		<0.5																	
3/21/18	159.08	209	5.56	48	19.7	8.34	4.91	4.5	<1,000	2,050	5.1	<0.033	<0.5	22																
9/18/18	160.30	349.94	4.38	54.12	27.18	18.21	5.49	4.52	<21.90	1,970	4.55	<0.025	<0.129	34																
3/20/19	161.67	353	6.29	42.4	20.8	9.63	5.5	4.7	<38.458	1,300	3.78	<0.008	<0.129	28									<0.758							
9/19/19	158.98	376	4.24	38.5	24.2	6.36		4.2																						
3/16/20	163.43	334	4.94	92.5	20.5	12.9	5.41	5	<200	2,680	4.76	<0.10	8.05	68																
9/21/20	159.97	383	5.25	45.2	23.6	6.47	4.67	4	<200	1,620	4.11	<0.10	<0.5	43																

	Groundwater Monitoring Indicator Parameters						40 CFR Part 257 Appendix III Detection Monitoring Parameters								40 CFR Part 257 Appendix IV Assessment Monitoring Constituents														
	Groundwater Elevation ft	ORP mV	DO mg/L	Specific conductance u mhos/cm	Temperature degrees C	Turbidity NTU 10	pH (lab) S.U. BG	pH (field) S.U. BG	Boron ug/L BG	Calcium ug/L BG	Chloride mg/L BG	Fluoride mg/L 4 mg/L	Sulfate mg/L BG	TDS mg/L BG	Antimony ug/L 6 ug/L	Arsenic ug/L 10 ug/L	Barium ug/L 2000 ug/L	Beryllium ug/L 4 ug/L	Cadmium ug/L 5 ug/L	Chromium ug/L 100 ug/L	Cobalt ug/L BG	Lead ug/L 15 ug/L	Lithium ug/L BG	Mercury ug/L 2 ug/L	Molybdenum ug/L BG	Radium 226 pCi/L 5 pCi/L	Radium 228 pCi/L 5 pCi/L	Radium 226 + 228 pCi/L 5 pCi/L	Selenium ug/L 50 ug/L	Thallium ug/L 2 ug/L
MW-LF-05																														
5/12/16	157.59	132	6.8	46	23.7	7.83		5	<1,000	1,890	5.02	0.0453	<0.5	22	<1.00	<1.00	19.4	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<5.00	1.42	2.1	3.52	<5.00	<1.00
7/14/16	156.70	208	5.67	51	25.6	18.4	6.535	3.8	<1,000	1,870	5.32	<0.033	<0.5	29.5	<1.00	<1.00	19.15	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<10.0	1.1	0.6395	1.7395	<5.00	<1.00
9/14/16	157.12	288	3.9	54	26.5	4.09		4.8	<1,000	2,002	5.91	<0.033	<0.5	20	<1.00	<1.00	24.4	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<5.00	<0.331	<1.93	<2.261	<5.00	<1.00
11/8/16	157.20	363	6.47	62	24.7	4.29		4	<1,000	1,760	6.13	0.0397	<0.5	27	<1.00	<1.00	20.9	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00		<1.00	1.08	2	3.08	<5.00	<1.00
1/25/17	158.54	225	5.33	54	23.2	7.65	4.62	4.6	<1,000	1,697	6.23	0.0578	<0.5	24	<1.00	<1.00	21.9	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.296	1.5	1.5	<5.00	<1.00
3/30/17	157.77	312	5.96	55	22.5	2.29	4.58	4.5	<1,000	2,081	6.63	0.0724	<0.5	33	<1.00	<1.00	22	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.481	<1.39	0.481	<5.00	<1.00
5/15/17	157.87	79.8	5.64	61	22.7	5.83	4.72	4.1	<1,000	2,151	6.39	0.0369	<0.5	32	<1.00	<1.00	26	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	1.33	<1.50	1.33	<5.00	<1.00
7/27/17	156.67	257	5.22	68	22.9	5.13	4.78	4.2	<1,000	2,191	6.99	<0.033	<0.5	54	<1.00	<1.00	25.4	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.403	<1.82	0.403	<5.00	<1.00
9/25/17	156.11	304	4.44	65	25.4	5.36	4.8	4.2	<1,000	2,334	7.24	<0.033	<0.5	34																
10/12/17	155.85	224	5.38	61	24.6	5.16		4.4		2,350	7.45		<0.5																	
10/30/17	156.01	276	5.58	61	24.6	5.54		4.4		2,332	7.53		<0.5																	
3/21/18	156.95	230	5.22	65	19.3	5.28	4.83	4.5	<1,000	2,500	7.43	<0.033	<0.5	32																
9/18/18	156.28	336.64	5.53	66.55	25.86	8.31	5.9	4.2	<21.90	2,060	7.44	<0.025	<0.129	41																
3/20/19	158.34	367	5.77	66.7	20.9	5.82	5.95	4.6	<38.458	2,420	7.96	<0.008	<0.129	36																
9/19/19	156.10	357	5.45	72	24.7	6.89		4.2																						
3/16/20	159.31	375	5.28	72.4	21.2	6.28	5.4	4.6	<200	2,880	8.87	<0.10	0.76	59																
9/18/20	157.08	397	4.67	71.4	24.4	5.62	4.71	3.8	<200	2,740	8.91	<0.10	<0.5	65																
MW-LF-06																														
5/12/16	159.45	129	5.82	62	23.8	5.75		4.8	<1,000	2,760	7.81	0.0435	<0.5	45	<1.00	<1.00	24.3	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<5.00	0.916	0.323	1.239	<5.00	<1.00
7/14/16	158.50	200	5.32	67	26.4	13	6.55	4	<1,000	2,620	7.9	0.0446	<0.5	37	<1.00	<1.00	23.7	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<10.0	1.18	0.314	1.494	<5.00	<1.00
9/15/16	158.16	345	4.89	71	24.6	4.36		4.6	<1,000	2,650	7.7	<0.033	<0.5	26.5	<1.00	<1.00	27.7	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<5.00	0.999	1.52	2.519	<5.00	<1.00
11/8/16	158.69	370	6.47	72	24.5	5.58		4	<1,000	2,328	7.87	0.0496	<0.5	39	<1.00	<1.00	27.6	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	1.02	<1.66	1.02	<5.00	<1.00
1/25/17	159.81	231	4.96	61	23.3	7.83	4.66	4.5	<1,000	1,712	7.83	0.0709	<0.5	27	<1.00	<1.00	19.8	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	1.06	<1.26	1.06	<5.00	<1.00
3/30/17	159.39	305	5.41	57	22.3	1.8	4.61	4.5	<1,000	2,433	7.74	0.0735	<0.5	36	<1.00	<1.00	22.9	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.442	<2.44	0.442	<5.00	<1.00
5/15/17	159.56	60.1	5.68	61	22.7	5.09	4.79	4.1	<1,000	2,433	7.13	0.0375	<0.5	36	<1.00	<1.00	21.8	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	1.09	<1.39	1.09	<5.00	<1.00
7/27/17	158.17	245	5.17	68	22.7	5.12	4.82	4.1	<1,000	2,311	7.49	<0.033	<0.5	52	<1.00	<1.00	21.2	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	<0.346	3.82	3.82	<5.00	<1.00
9/26/17	157.38	260	3.95	61	24.1	6.24	4.9	4.4	<1,000	2,229	7.31	<0.033	<0.5	34																
10/12/17	157.18	216	4.79	56	25.5	5.13		4.4		2,180	7.36		<0.5																	
10/30/17	157.16	254	5.19	56	24.9	5.11		4.4		2,346	7.41		<0.5																	
3/21/18	157.98	241	6.01	57	19.5	5.74	4.91	4.5	<1,000	2,320	7.2	0.0339 J	<0.5	28																
9/18/18	158.72	275.56	4.9	61.93	25.26	8.8	5.79	4.19	<21.90	2,260	7.65	<0.025	<0.129	34																
3/20/19	159.98	365	5.11	58.2	20.5	7.34	5.91	4.6	<38.458	2,110	7.63	<0.008	<0.129	29									<0.758							
9/19/19	157.57	348	4.97	57.5	25.2	6.68		4.4																						
3/16/20	161.35	376	4.77	59.2	21.1	7.88	5.17	4.6	<200	2,400	7.54	<0.10	<0.50	43																
9/18/20	158.18	368	4.29	58.9	24.8	6.36	4.9	4.1	<200	2,210	7.58	<0.10	<0.50	46																
MW-BG-06																														
11/8/16	175.13	367	6.67	205	20.4	4.36		3.9	<1,000	9,462	18.69	0.0624	1	106	<1.00	<1.00	120	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	3.4	4.3	7.7	<5.00	<1.00
1/26/17	177.19	184	5.93	186	18.1	6.26	4.34	4.4	<1,000	8,856	19.28	0.0631	<0.5	84	<1.00	1.5	119	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	3.5	4.47	7.97	<5.00	<1.00
3/29/17	175.40	344	6.92	165	19	1.56	4.34	4.3	<1,000	10,020	18.12	0.0883	<0.5	118	<1.00	<1.00	132	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	2.24	2.8	5.04	<5.00	<1.00
5/16/17	175.02	69	6.45	184	17.7	6.42	4.37	3.8	<1,000	10,090	17.96	0.0621	<0.5	103	<1.00	<1.00	127	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	2.78	4.88	7.66	<5.00	<1.00
7/28/17	172.07	201	6.59	194	18.2	5.17	4.43	4.1	<1,000	10,590	19.72	0.165	<0.5	123	<1.00	<1.00	115	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	3.36	4.27	7.63	<5.00	<1.00
9/26/17	171.67	330	4.19	193	20.1	6.18	4.54	4	<1,000	9,973	18.3	<0.033	<0.5	109																
10/10/17	171.23	229	5.17	176	20.1	5.82		4.1																						
10/30/17	171.80	225	5.41	178	18.6	5.86		4.4		9,998	18.8		<0.5																	
2/22/18	174.47	299	6.75	186	17.4	4.9		4.5	<200	9,770	18.8	<0.033	<0.5	94	<1.00	<1.00	112	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
3/21/18	174.47	150	6.81	187	16.1	5.51	4.61	4.7	<1,000	10,900	19.8	0.0571 J	<0.5	82																
9/17/18	173.46	293.83	7.12	194.36	20.72	4.67	5.41	3.98	<21.90	9,150	18.3	<0.025	<0.129	110																
3/21/19	175.51	403	6.95	178	17	7.12	5.2	4.4	<38.458	8,840	18.7	<0.008	<0.129	101									0.783							
9/19/19	171.20	352	6.34	181	20.1	6.37		4.1																						
3/16/20	176.50	375	7.71	194	16.8	7.95	4.61	4.4	<200	11,400	18.9	<0.10	<0.50	143																
9/18/20	174.16	430	6.02	178	20.3	6.17	4.41	3.4	<200	10,200	18.3	<0.10	<0.50	125																
MW-BG-16																														
11/8/16	173.46	429	6.18	36	18.8	4.09		4.1	<1,000	2,045	4.11	0.0356	1.09	14	<1.00	<1.00	12.9	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.54	2.64	3.18	<5.00	<1.00
1/26/17	174.89	139	5.79	46	17.5	6.08	4.76	5	<1,000	1,866	3.98	0.0598	1.35	15	<1.00	<1.00	13	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.724	1.45	2.174	<5.00	<1.00
3/29/17	174.30	313	6.36	36	18.3	1.39	4.67	4.6	<1,000	1,711	3.37	0.0495	1.31	23	<1.00	<1.00	10.5	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.544	<1.66	0.544	<5.00	<1.00
5/16/17	173.89	57.8	6.2	42	17.5	5.48	4.86	4.2	<1,000	1,783	3.03	<0.033	1.16	24	<1.00	<1.00	11.8	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.848	<1.25	0.848	<5.00	<1.00
7/28/17	171.92	136	6.55	64	18	5.27	4.89	4.1	<1,000	1,969	3.38	<0.033	1.03	43	<1.00	<1.00	11.1	<2.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00	0.57	2.32	2.89	<5.00	<1.00
9/26/17	171.28	307	4.32	49	20.1	5.32	5.13	4.2	<1,000	2,145	3.81	<0.033	0.79	31																
10/10/17	170.80	210	6.13	48	20.4	5.64		4.5																						
10/30/17	171.16	203	7	47	18.4	5.09		4.6		2,268	3.95		0.78																	
2/22/18	172.25	293	7.17	53	17.5	5.17		4.7	<200	2,440	5.16	<0.2	0.85	33	<1.00	<1.00	14.7	<1.00	<1.00	<1.00	<1.00	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
3/21/18	172.27	96.4	7.26	63	15.9	5.51	4.95	4.7	<1,000	2,540	5.22	0.034 J	0.83	28																
9/17/18	172.07	306.14	6.67	43.56	20.76	2.09	5.86	4.14	<21.90	1,810	3.75	<0.025	1.13	26																
3/21/19	174.03	375	5.72	39.7	16.1	7.39	6.11	4.8	<38.458	1,700	4.12	<0.008	1.48	12									<0.758							
9/19/19	170.27	307	7.94	41.5	19.9	5.83		4.5																						
3/16/20	174.24	359	6.6	42.6	16.5	7.46	5.18	4.8	<200	1,930	4.17	<0.10	0.87	43																
9/18/20	172.60	403	6.89	39.7	20.1	6.32	4.94	3.8	<200	1,780	2.86	<0.10	1.43	31																
AS-LF-01																														
12/11/17	163.25	208	5.21	74	20.2	5.76	5.99	5.3	<1,000	7,872	6.29	0.0854	4.65	59	<1.00	<1.00	18.2	<2.00	<1.00	<1.00	5.2	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
12/19/17	163.20	217	3.71	77	20.8	5.65	5.77	5.3	<1,000	8,482	7.09		4	39	<1.00	<1.00	21.4	<2.00	<1.00	<5.00	8	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
12/28/17	163.57	239.5	3.95	64	16.41	4.28	5.41	5.9	<1,000	6,771	6.64	<0.2	3.55	58	<1.00	<1.00	23.9	<2.00	<1.00	<1.00	9.02	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
2/21/18	163.58	235	5.01	60	18	4.62		5.2	<200	5,130	7.41	<0.2	1.83	50	<1.00	<1.00	29.6	<1.00	<1.00	<1.00	8.2	<1.00	2.41	<0.2	<1.00				<5.00	<1.00
3/22/18	163.27	210	4.77	54	14.7	5.28	5.4	5	<1,000	4,030	7.07	0.0804 J	2.08	40	<1.00	<1.00	28.9	<2.00	<1.00	0.13 J	5.7	0.09 J	1.00 J	<0.2	0.06 J	1.3	<1.78	1.3	<5.00	<1.00
9/18/18	164.62	292.3	3.85	56.96	24.75	0.88	5.36	4.28	<21.90	2,690	7.19	<0.025	2.85	33																
3/21/19	166.64	390	3.87	56.3	15.9	8.02	5.52	4.7	<38.458	3,120	4.5	<0.008	8.86	28									<0.758							
9/20/19	164.06	399	1.79	51.2	24	2.4		4.4																						
3/17/20	167.52	375	5.22	65.9	16.2	6.11	5.07	4.7	<200	3,090	3.02	<0.10	12.8	38																
9/18/20	165.64	371	3.15	56.2	24.4	6.08	5.04	4.1	<200	2,190	2.14	<0.10	13.4	45																
AS-LF-02																														
12/11/17	164.47	155	2.04	301	20.3	6.14	6.89	6.3	<1,000	50,870	21.9	0.255	14.3	203	<1.00	<1.00	56.5	<2.00	<1.00	1.8	2.5	<1.00	<2.00	<0.2	3.1				<5.00	<1.00
12/19/17	164.24	166	1.61	278	21	6.15	6.5	6.1	<1,000	44,510	20.4		12.3	139	<1.00	<1.00	56.5	<2.00	<1.00	<5.00	3.2	<1.00	<2.00	<0.2	2				<5.00	<1.00
12/28/17	164.71	169.1	2	236	18.29	4.1	6.18	6.5	<1,000	36,720	19.1	<0.2	8.8	137	<1.00	<1.00	61.2	<2.00	<1.00	<1.00	3.5	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
2/21/18	164.58	194	2.98	194	17.7	6.41		5.9	<200	24,060	19.5	<0.2	4.22	118	<1.00	<1.00	70.1	<1.00	<1.00	<1.00	2.5	<1.00	<2.00	<0.2	<1.00				<5.00	<1.00
3/22/18	164.40	196	2.89	190	16.3	6.36	6.15	5.8	<1,000	24,400	20.3	0.108	3.35	107	<1.00	0.40 J	70.9	<2.00	<1.00	0.36 J	2.8	0.16 J	0.61 J	<0.2	0.29 J	1.97	2.48	4.45	<5.00	0.04 J
9/17/18	165.44	224.53	2.27	169.86	23.47	5.07	5.72	5.29	<21.90	15,800	19.1	<0.025	4.7	104																
3/21/19	167.49	347	2.25	107	17	7.41	5.55	5	<38.458	5,740	14.4	<0.008	14.5	76									<0.758							
9/20/19	164.97	364	2.53	123	22.3	3.06		4.8																						
3/17/20	168.02	392	3.55	88.9	16.3	8.17	4.96	4.7	<200	4,220	9.67	<0.10	16.1	75																
9/18/20	166.61	345	2.71	88.9	22.6	7.03	5.13	4.2	57.70	4,630	5.71	<0.10	21.6	64																

	Groundwater Monitoring Indicator Parameters						40 CFR Part 257 Appendix III Detection Monitoring Parameters								40 CFR Part 257 Appendix IV Assessment Monitoring Constituents														
	Groundwater Elevation ft	ORP mV	DO mg/L	Specific conductance *u* mhos/cm	Temperature degrees C	Turbidity NTU 10	pH (lab) S.U. BG	pH (field) S.U. BG	Boron ug/L BG	Calcium ug/L BG	Chloride mg/L BG	Fluoride mg/L 4 mg/L	Sulfate mg/L BG	TDS mg/L BG	Antimony ug/L 6 ug/L	Arsenic ug/L 10 ug/L	Barium ug/L 2000 ug/L	Beryllium ug/L 4 ug/L	Cadmium ug/L 5 ug/L	Chromium ug/L 100 ug/L	Cobalt ug/L BG	Lead ug/L 15 ug/L	Lithium ug/L BG	Mercury ug/L 2 ug/L	Molybdenum ug/L BG	Radium 226 pCi/L 5 pCi/L	Radium 228 pCi/L 5 pCi/L	Radium 226 + 228 pCi/L 5 pCi/L	Selenium ug/L 50 ug/L	Thallium ug/L 2 ug/L
MW-40																													
12/11/17	165.25	209	0.31	502	21.8	6.08	4.59	4	<1,000	53,300	48	0.374	190	320	<1.00	2.6	57.6	<2.00	<1.00	<1.00	15.2	2.1	<2.00	<0.2	<1.00				15.5	<1.00
12/19/17	165.17	241	0.41	255	21.6	5.58	4.61	4.6	<1,000	28,470	45.8		152	246	<1.00	1.2	97.9	<2.00	<1.00	<1.00	11.7	<1.00	<2.00	<0.2	<1.00				7.4	<1.00
12/28/17	165.46	282.7	0.26	520	19.53	7.51	4.3	5	<1,000	57,200	52.3	<0.40	186	340	<1.00	2.97	54.6	<2.00	<1.00	<1.00	13.3	1.99	<2.00	0.33	<1.00				17.3	<1.00
2/21/18	165.46	285	0.38	491	19.8	4.49		4.8	<200	62,040	54.7	<0.60	229	404	<1.00	4.2	60.1	<1.00	<1.00	<1.00	11.1	1.8	<2.00	0.27	<1.00				25.5	<1.00
3/21/18	165.15																													
9/17/18	166.53	325.72	0.27	986.87	24.22	8.77	4.24	4.26	198	95,400	140	<0.025	337	737																
3/21/19	165.71	398	0.43	317	18	6.39	4.67	4.7	154	66,100	117	<0.025	220	527									1.6							
9/20/19	166.15	318	0.34	698	23.3	1.83		4.3																						
9/20/19	166.15	318	0.34	698	23.3	1.83		4.3																						
3/17/20	169.82	381	0.74	595	17.9	5.44	4.6	4.4	119 J	56,500	107	<0.50	137	467																
9/18/20	167.58	299	1.5	354	23.6	5.48	4.32	4.1	72.8	35,300	63.8	<0.20	116	316																
Landfill Leachate																														
12/19/17							3.55		<1,000	1,564,600	3,128		1,204	6,266	<2.00	7.2	218	<8.00	<2.00	<20.0	53.6	5.6	3,350	<0.2	38.8				40	4.2
12/28/17							3.14		<20,000	1,892,000	3,596	<1.00	1,040	6,924	<10.0	8.51	267.2	4.52	<10.0	<10.0	63.6	<10.0	3,900	<0.2	18.8				<200	<10.0
2/22/18									<2,000	1,853,000	4,445	<10.0	921	8,322	<10.0	14.4	331	4.5	<10.0	<10.0	82.5	<10.0	6,254	<0.2	17				<200	<10.0

Notes: Monitoring well locations highlighted in green are background monitoring locations.

Monitoring well locations highlighted in orange are down gradient compliance monitoring locations.

BG = Background; For those constituents for which a Maximum Contaminant Level (MCL) has not been established by the US EPA, detected concentrations in groundwater at compliance monitoring well locations are compared to concentrations detected in groundwater at background locations to determine if a statisticaly significant increase in concentrations above background levels is evident from the data.

Results shown in blue indicate the analyte was not detected above the indicated laboratory reporting limit (i.e., the value listed).

Monitoring well locations highlighted in blue are Alternate Source Demonstration wells.

Nautilus Geologic Consulting, PLLC

APPENDIX A

Results of Laboratory Analyses of Groundwater Samples

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09474**

Cope Well MW-BG-06 Tot Metal CCR

Date & Time Sampled: March 16, 2020 10:51
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COBG06TM

BG-06

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	11400	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	0.89 (J)	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	9030	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	1658	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	2916	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Bonnette

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09475**

Cope Well Field Blank T Metal CCR

Date & Time Sampled: March 16, 2020 11:20
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COFBTM

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	Less than MDL	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	Less than MDL	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	Less than MDL	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	Less than MDL	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Bennett

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09476**

Cope Well MW-BG-16 TMetal CCR

Date & Time Sampled: March 16, 2020 11:34
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COBG16TM

BG-16

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	1930	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	1270	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	1430	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	1300	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Shirley M Bentley

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09477**

Cope Well LF-6 T Metal CCR

Date & Time Sampled: March 16, 2020 12:25
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF6TM

LF-6

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	2400	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	2010	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	427.00 (J)	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	3050	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Shirley M Barrett

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09478**

Cope Well LF-5 T Metal CCR

Date & Time Sampled: March 16, 2020 13:07
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF5TM

LF-5

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	2880	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	1.35 (J)	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	2230	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	1370	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	3820	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Smith

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09479**

Cope Well LF-4 T Metal CCR

Date & Time Sampled: March 16, 2020 14:04
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF4TM

LF-4

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	2680	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	1.00 (J)	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	1760	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	581.00 (J)	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	10700	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashleym Bonnette

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09480**

Cope Well Duplicate T Metal CCR

Date & Time Sampled: March 16, 2020 14:12
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: CODUPTM

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	2760	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	1.04 (J)	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	1820	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	535.00 (J)	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	10900	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Bomette

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09481**

Cope Well LF-3 T Metal CCR

Date & Time Sampled: March 16, 2020 15:08
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF3TM

LF-3

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	1180	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	7.64	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	668	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	3470	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	4990	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Barnette

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09482**

Cope Well LF-02 TMetal CCR

Date & Time Sampled: March 16, 2020 16:01
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF2TM

LF-2

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	4570	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	1.12 (J)	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	3410	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	5160	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	7900	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Bratton

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09483**

Cope Well LF-01 TMetal CCR

Date & Time Sampled: March 16, 2020 16:39
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF1TM

LF-1

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	54.50 (J)	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	2420	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	1210	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	630.00 (J)	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	3230	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Bonnette

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09484**

Cope Well AS-LF-1 T Metal CCR

Date & Time Sampled: March 17, 2020 07:49
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COASLF1TM

LF-1

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	3090	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	982	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	1200	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	3100	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Bonnette

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09485**

Cope Well AS- LF-2 T Metal CCR

Date & Time Sampled: March 17, 2020 08:28
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COASLF2TM

LF-2

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than MDL	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	4220	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	Less than MDL	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	3500	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	1780	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	2780	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Bennett

Dominion Energy

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

March 19, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09486**

Cope GW Well MW-40 Tota1 Metal (RCRA)

Date & Time Sampled: March 17, 2020 09:20
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COG40TM

MW-40

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	119.00 (J)	200	38.458	ppb	3/19/20 09:16	AMB/C
Calcium EPA 200.7	56500	500	83.8	ppb	3/19/20 09:16	AMB/C
Lithium (CWA) 200.7	1.78 (J)	2.0	0.758	ppb	3/19/20 12:46	AMB/C
Magnesium EPA 200.7	14100	50	18.7	ppb	3/19/20 09:16	AMB/C
Potassium EPA 200.7	12100	1000	310	ppb	3/19/20 09:16	AMB/C
Sodium EPA 200.7	30500	1000	254	ppb	3/19/20 09:16	AMB/C

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

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

Approved By: Ashley M Barnett

Dominion Energy

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

March 27, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09461**

Cope Well MW-BG-06 CCR

Date & Time Sampled: March 16, 2020 10:51
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COBG06TDS

BG-06

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.9	0.50	0.038	mg/L	3/18/20 01:14	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/18/20 01:14	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.61			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	Less than PQL	0.50	0.063	mg/L	3/18/20 01:14	BB
Total Alkalinity by SM2320B	1.5	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	143	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 27, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09463**

Cope Well MW-BG-16 CCR

Date & Time Sampled: March 16, 2020 11:34
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COBG16TDS

BG-16

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.17	0.50	0.038	mg/L	3/18/20 01:14	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/18/20 01:14	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.18			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	0.87	0.50	0.063	mg/L	3/18/20 01:14	BB
Total Alkalinity by SM2320B	1.5	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	43	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 27, 2020

REPORT TO:
Rashida Marlowe

Sample ID: **BA09462**

Cope Well Field Blank CCR

Date & Time Sampled: March 16, 2020 11:20
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COFBTDS

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	Less than PQL	0.50	0.038	mg/L	3/18/20 01:14	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/18/20 01:14	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	7.09			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	Less than PQL	0.50	0.063	mg/L	3/18/20 01:14	BB
Total Alkalinity by SM2320B	1.5	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	21	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 27, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09464**

Cope Well LF-6 CCR

Date & Time Sampled: March 16, 2020 12:25
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF6TDS

LF-6

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	7.54	0.50	0.038	mg/L	3/18/20 01:14	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/18/20 01:14	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.17			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	Less than PQL	0.50	0.063	mg/L	3/18/20 01:14	BB
Total Alkalinity by SM2320B	Less than PQL	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	43	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: 

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09465**

Cope Well LF-5 CCR

Date & Time Sampled: March 16, 2020 13:07
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF5TDS

LF-5

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	8.87	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.40			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	0.76	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	3.0	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	59	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09466**

Cope Well LF-4 CCR

Date & Time Sampled: March 16, 2020 14:04
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF4TDS

LF-4

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.76	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.41			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	8.05	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	7.5	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	68	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09467**

Cope Well Duplicate CCR

Date & Time Sampled: March 16, 2020 14:12
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: CODUPTDS

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.74	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.43			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	7.99	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	7.5	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	72	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09468**

Cope Well LF-3 CCR

Date & Time Sampled: March 16, 2020 15:08
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF3TDS

LF-3

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	3.38	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.42			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	4.20	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	7.5	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	46	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09469**

Cope Well LF-02 CCR

Date & Time Sampled: March 16, 2020 16:01
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF2TDS

LF-2

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	28.9	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.66			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	4.06	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	Less than PQL	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	93	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09470**

Cope Well LF-01 CCR

Date & Time Sampled: March 16, 2020 16:39
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COLF1TDS

LF-1

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	9.21	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.23			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	Less than PQL	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	4.5	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	39	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: 

Dominion Energy

Central Laboratory (P-08)
2102 North Lake Drive
Columbia, SC 29212
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March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09471**

Cope Well AS-LF-1 CCR

Date & Time Sampled: March 17, 2020 07:49
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COASLF1TDS

LF-1

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	3.02	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	5.07			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	12.8	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	Less than PQL	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	38	2.0	2.0	mg/L	3/18/20 10:00	MS469

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

Approved By: _____

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09472**

Cope Well AS-LF-2 CCR

Date & Time Sampled: March 17, 2020 08:28
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COASLF2TDS

LF-2

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	9.67	0.50	0.038	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.10	0.008	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.96			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	16.1	0.50	0.063	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	Less than PQL	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	75	2.0	2.0	mg/L	3/18/20 10:00	MS46

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

Approved By: 

Dominion Energy

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

March 26, 2020

REPORT TO:

Rashida Marlowe

Sample ID: **BA09473**

Cope GW Well MW-40 Anion (RCRA)

Date & Time Sampled: March 17, 2020 09:20
Date & Time Submitted: March 17, 2020 11:40
Collected by: C.SANDEL Location Code: COG40ANS

MW-40

Login Record File: 200317001

CERTIFIED BY SCDHEC (LAI ID 32006):	Result	Reporting Limit(PQL)	Detection Limit(MDL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	107	2.50	0.190	mg/L	3/20/20 21:45	BB
Fluoride by IC EPA 300.0	Less than PQL	0.50	0.040	mg/L	3/20/20 21:45	BB
pH by SM4500HB(2011) Holding Time of 15 minutes has been exceeded.	4.60			S.U.	3/17/20 15:34	PRC
Sulfates by IC EPA 300.0	137	2.50	0.315	mg/L	3/20/20 21:45	BB
Total Alkalinity by SM2320B	Less than PQL	0.50	0.50	mg/L	3/17/20 15:34	PRC
Total Dissolved Solid-SM2540C	467	2.0	2.0	mg/L	3/18/20 10:00	MS469

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11236**

Cope Well MW-40 CCR TDS

Date & Time Sampled: September 18, 2020 10:00
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COG40ANS

MW-40 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	63.8	1.00	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.20	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.32		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	116	1.00	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	316	2.0	mg/L	9/24/20 13:45	MS

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11237**

Cope Well AS-LF-2 CCR TDS

Date & Time Sampled: September 18, 2020 10:41
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COASLF2TDS

LF-2 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	5.71	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	5.13		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	21.6	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	3.20	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	64	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11238**

Cope Well Field Blank CCR TDS

Date & Time Sampled: September 18, 2020 11:00
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COFBTDS

Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	5.90		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	4.80	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	11	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11239**

Cope Well AS-LF-1 CCR TDS

Date & Time Sampled: September 18, 2020 11:19
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COASLF1TDS

LF-1 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	2.14	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	5.04		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	13.4	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	45	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11240**

Cope Well MW-LF-5 CCR TDS

Date & Time Sampled: September 18, 2020 12:12
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF5TDS

LF-5 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	8.91	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.71		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	65	2.0	mg/L	9/24/20 13:45	MS

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11241**

Cope Well DUP CCR TDS

Date & Time Sampled: September 18, 2020 12:20
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: CODUPTDS

Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	8.85	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.66		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	55	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11242**

Cope Well MW-LF-6 CCR TDS

Date & Time Sampled: September 18, 2020 12:59
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF6TDS

LF-6 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	7.58	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.90		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	46	2.0	mg/L	9/24/20 13:45	MS

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

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11243**

Cope Well MW-BG-16 CCR TDS

Date & Time Sampled: September 18, 2020 13:55
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COBG16TDS

BG-16 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	2.86	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.94		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	1.43	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	31	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11244**

Cope Well MW-BG-06 CCR TDS

Date & Time Sampled: September 18, 2020 14:45
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COBG06TDS

BG-06 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	18.3	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.41		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	125	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11245**

Cope Well MW-LF-01 CCR TDS

Date & Time Sampled: September 21, 2020 08:48
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF1TDS

LF-1 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	7.04	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.77		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	36	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11246**

Cope Well MW-LF-02 CCR TDS

Date & Time Sampled: September 21, 2020 09:38
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF2TDS

LF-2 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	31.4	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.39		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	4.48	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	96	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11247**

Cope Well MW- LF-3 CCR TDS

Date & Time Sampled: September 21, 2020 10:25
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF3TDS

LF-3 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	3.26	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.78		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	35	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11248**

Cope Well MW-LF-4 CCR TDS

Date & Time Sampled: September 21, 2020 11:17
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF4TDS

LF-4 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Chlorides by IC EPA 300.0	4.11	0.50	mg/L	9/22/20 18:24	BB
Fluoride by IC EPA 300.0	Less than	0.10	mg/L	9/22/20 18:24	BB
pH by SM4500HB(2011)	4.67		S.U.	9/22/20 16:14	MS
Holding Time of 15 minutes has been exceeded.					
Sulfates by IC EPA 300.0	Less than	0.50	mg/L	9/22/20 18:24	BB
Total Alkalinity by SM2320B	Less than	0.50	mg/L	9/22/20 16:14	MS
Total Dissolved Solid-SM2540C	43	2.0	mg/L	9/24/20 13:45	MS

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

Approved By:

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11249**

Cope Well MW-40 CCR Metals

Date & Time Sampled: September 18, 2020 10:00
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COG40TM

MW-40 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	72.8	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	35300	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	9360	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	7550	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	19200	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11250**

Cope Well AS-LF-2 CCR Metals

Date & Time Sampled: September 18, 2020 10:41
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COASLF2TM

LF-2 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	57.7	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	4630	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	3000	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	2530	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	2820	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11251**

Cope Well Field Blank CCR Metals

Date & Time Sampled: September 18, 2020 11:00
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COFBTM

Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	Less than	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	Less than	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	Less than	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	Less than	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11252**

Cope Well AS-LF-1 CCR Metals

Date & Time Sampled: September 18, 2020 11:19
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COASLF1TM

LF-1 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	2190	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	659	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	1350	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	3470	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11253**

Cope Well MW-LF-5 CCR Metals

Date & Time Sampled: September 18, 2020 12:12
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF5TM

LF-5 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	2740	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	2070	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	864	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	3220	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11254**

Cope Well DUP CCR Metals

Date & Time Sampled: September 18, 2020 12:20
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: CODUPTM

Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	2720	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	2070	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	891	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	3210	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11255**

Cope Well MW-LF-6 CCR Metals

Date & Time Sampled: September 18, 2020 12:59
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF6TM

LF-6 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	2210	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	1690	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7 *** Result is less than MRL ***	245	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	2950	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11256**

Cope Well MW-BG-16 CCR Metals

Date & Time Sampled: September 18, 2020 13:55
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COBG16TM

BG-16 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	1780	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	1100	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	1400	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	1070	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11257**

Cope Well MW-BG-06 CCR Metals

Date & Time Sampled: September 18, 2020 14:45
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COBG06TM

BG-06 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	10200	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	8500	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	1670	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	3330	1000	ppb	9/24/20 08:31	CHG

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

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January 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11258**

Cope Well MW-LF-01 CCR Metals

Date & Time Sampled: September 21, 2020 08:48
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF1TM

LF-1 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	1760	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	923	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	329	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	2300	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11259**

Cope Well MW-LF-02 CCR Metals

Date & Time Sampled: September 21, 2020 09:38
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF2TM

LF-2 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	85.6	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	3900	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	3030	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	4650	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	7330	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe

Rocky Archer

Sample ID: **BA11260**

Cope Well MW- LF-3 CCR Metals

Date & Time Sampled: September 21, 2020 10:25
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF3TM

LF-3 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	41.4	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	1140	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	687	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	861	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	1220	1000	ppb	9/24/20 08:31	CHG

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 07, 2021

REPORT TO:

Rashida Marlowe
Rocky Archer

Sample ID: **BA11261**

Cope Well MW-LF-4 CCR Metals

Date & Time Sampled: September 21, 2020 11:17
Date & Time Submitted: September 21, 2020 12:57
Collected by: C.SANDEL Location Code: COLF4TM

LF-4 Login Record File: 200921004

CERTIFIED BY SCDHEC (LAB ID 32006):	Result	Reporting Limit(PQL)	Units	Completed Analysis Date & Time	Chemist
Boron - EPA 200.7	Less than	200	ppb	9/24/20 08:31	CHG
Calcium EPA 200.7	1620	500	ppb	9/24/20 08:31	CHG
Magnesium EPA 200.7	1220	50	ppb	9/24/20 08:31	CHG
Potassium EPA 200.7	345	1000	ppb	9/24/20 08:31	CHG
Sodium EPA 200.7	1720	1000	ppb	9/24/20 08:31	CHG

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

Approved By:

Nautilus Geologic Consulting, PLLC

APPENDIX B

Statistical Analysis of Detection Monitoring Groundwater Quality Results

DOMINION ENERGY
SOUTH CAROLINA

COPE STATION
CLASS III LANDFILL

ORANGEBURG COUNTY, SOUTH CAROLINA

CCR GROUNDWATER DETECTION MONITORING STATISTICAL ANALYSIS REPORT

for the

March 2020 Sampling Event

Prepared on
April 24, 2020

Dominion Energy®

STATISTICAL ANALYSIS REPORT

Groundwater Sampling

In accordance with 40 CFR Part 257.94, the 2020 first semi-annual groundwater sampling event for Detection Monitoring at the Cope Station Landfill occurred on March 16, 2020. This event included groundwater sampling from background monitoring wells MW-BG-06, MW-BG-16, MW-LF-01, MW-AS-01, MW-AS-02, and MW-AS-40; and the downgradient compliance monitoring wells MW-LF-02, MW-LF-03, MW-LF-04, MW-LF-05, and MW-LF06. The groundwater samples were analyzed for the constituents listed in Appendix III of the EPA CCR Rule which include Boron, Calcium, Chloride, Fluoride, pH, Sulfate, and Total Dissolved Solids.

Statistical Analysis

The statistical analysis presents no statistically significant increases above (above/below for pH) background concentrations for the CCR Rule Appendix III constituents in the groundwater samples collected from the Landfill monitoring wells during the March 2020 Detection Monitoring event.

Cope Station

Detection Monitoring Summary

Run Id: 1

Location Id: **MW-LF-02**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total ug/L	03/16/2020	BA09482	--	--	< 200.000	n		--

Run Id: 2

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total ug/L	03/16/2020	BA09482	1 of 2	95400.000	4570.000	n		--

Run Id: 3

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	03/16/2020	BA09469	1 of 2	140.00	28.90	n		--

Run Id: 4

Location Id: **MW-LF-02**

Compliance Test: **Parametric Prediction Interval on Background**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	03/16/2020	FLD20200316	1 of 2	5.280	4.300	n/n		--

Run Id: 5

Location Id: **MW-LF-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.

Cope Station

Detection Monitoring Summary

Run Id: 5

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	03/16/2020	BA09469	1 of 2	0.140	< 0.100	n		--

Run Id: 6

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	03/16/2020	BA09469	1 of 2	337.000	4.060	n		--

Run Id: 7

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	03/16/2020	BA09469	1 of 2	737.000	93.000	n		--

Run Id: 8

Location Id: **MW-LF-03**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total ug/L	03/16/2020	BA09481	--	--	< 200.000	n		--

Run Id: 9

Location Id: **MW-LF-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.

Cope Station

Detection Monitoring Summary

Run Id: 9

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total ug/L	03/16/2020	BA09481	1 of 2	95400.000	1180.000	n		--

Run Id: 10

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	03/16/2020	BA09468	1 of 2	140.00	3.38	n		--

Run Id: 11

Location Id: **MW-LF-03**

Compliance Test: **Parametric Prediction Interval on Background**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	03/16/2020	FLD20200316	1 of 2	5.280	5.000	n/n		--

Run Id: 12

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	03/16/2020	BA09468	1 of 2	0.140	< 0.100	n		--

Run Id: 13

Location Id: **MW-LF-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.

Cope Station

Detection Monitoring Summary

Run Id: 13

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	03/16/2020	BA09468	1 of 2	337.000	4.200	n		--

Run Id: 14

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	03/16/2020	BA09468	1 of 2	737.000	46.000	n		--

Run Id: 15

Location Id: **MW-LF-04**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total ug/L	03/16/2020	BA09479	--	--	< 200.000	n		--

Run Id: 16

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total ug/L	03/16/2020	BA09479	1 of 2	95400.000	2680.000	n		--

Run Id: 17

Location Id: **MW-LF-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.

Cope Station

Detection Monitoring Summary

Run Id: 17

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	03/16/2020	BA09466	1 of 2	140.00	4.76	n		--

Run Id: 18

Location Id: **MW-LF-04**

Compliance Test: **Parametric Prediction Interval on Background**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	03/16/2020	FLD20200316	1 of 2	5.280	5.000	n/n		--

Run Id: 19

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	03/16/2020	BA09466	1 of 2	0.140	< 0.100	n		--

Run Id: 20

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	03/16/2020	BA09466	1 of 2	337.000	8.050	n		--

Run Id: 21

Location Id: **MW-LF-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.

Cope Station

Detection Monitoring Summary

Run Id: 21

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	03/16/2020	BA09466	1 of 2	737.000	68.000	n		--

Run Id: 22

Location Id: **MW-LF-05**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total ug/L	03/16/2020	BA09478	--	--	< 200.000	n		--

Run Id: 23

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total ug/L	03/16/2020	BA09478	1 of 2	95400.000	2880.000	n		--

Run Id: 24

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	03/16/2020	BA09465	1 of 2	140.00	8.87	n		--

Run Id: 25

Location Id: **MW-LF-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.

Cope Station

Detection Monitoring Summary

Run Id: 25

Location Id: **MW-LF-05**

Compliance Test: **Parametric Prediction Interval on Background**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	03/16/2020	FLD20200316	1 of 2	5.280	4.600	n/n		--

Run Id: 26

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	03/16/2020	BA09465	1 of 2	0.140	< 0.100	n		--

Run Id: 27

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	03/16/2020	BA09465	1 of 2	337.000	0.760	n		--

Run Id: 28

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	03/16/2020	BA09465	1 of 2	737.000	59.000	n		--

Run Id: 29

Location Id: **MW-LF-06**

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.

Cope Station

Detection Monitoring Summary

Run Id: 29

Location Id: **MW-LF-06**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total ug/L	03/16/2020	BA09477	--	--	< 200.000	n		--

Run Id: 30

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total ug/L	03/16/2020	BA09477	1 of 2	95400.000	2400.000	n		--

Run Id: 31

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	03/16/2020	BA09464	1 of 2	140.00	7.54	n		--

Run Id: 32

Location Id: **MW-LF-06**

Compliance Test: **Parametric Prediction Interval on Background**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	03/16/2020	FLD20200316	1 of 2	5.280	4.600	n/n		--

Run Id: 33

Location Id: **MW-LF-06**

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.

Cope Station

Detection Monitoring Summary

Run Id: 33

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	03/16/2020	BA09464	1 of 2	0.140	< 0.100	n		--

Run Id: 34

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	03/16/2020	BA09464	1 of 2	337.000	< 0.500	n		--

Run Id: 35

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	03/16/2020	BA09464	1 of 2	737.000	43.000	n		--

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.

Cope Station
Parametric Prediction Interval on Background - Background Data Calculation

Number Of Locations:	5	Annual Site Wide False Positive Rate (SWFPR):	0.10
Number Of Parameters:	7	Sample Events per Year:	2
Sampling Plan:	Interwell	Verification Sampling:	Pass 1 of 2 (one resample)

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

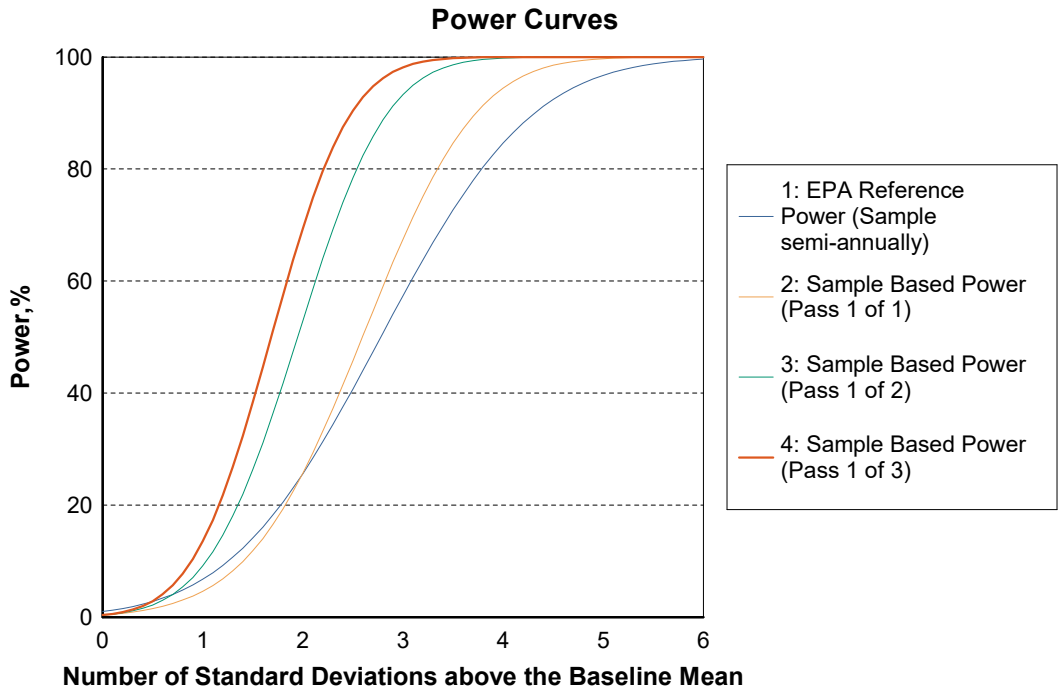
Insufficient Background: 0
DQR Tests: 1

Parameter Name:	**Field pH, S.U.**	Background Date Range:	05/01/2016 to 03/17/2020
Alpha Per Test FPR:	0.00174	Option for LT Pts:	0% to <= 15% Substitute ½ PQL
Total Pts	44	Kappa for Selected Verification Plan:	1.966
LT Pts	0	Mean	4.4791
%LT Pts	0	StdDev	0.4074
Normal/Log Normal	y/y	ln Mean	1.4956
Log Transformed:	n	ln StdDev	0.0876

Cope Station
Parametric Prediction Interval on Background - Background Data Calculation

Number Of Locations:	5	Annual Site Wide False Positive Rate (SWFPR):	0.10
Number Of Parameters:	7	Sample Events per Year:	2
Sampling Plan:	Interwell	Verification Sampling:	Pass 1 of 2 (one resample)

Power Curves (MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01 - Field pH, S.U



Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 4/30/2020
No. of Verification Resamples: 1

Run Id: 2

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	ug/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	95,400.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	03/16/2020	4,570.000	n

Run Id: 3

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	03/16/2020	28.90	n

Run Id: 5

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	45	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.54	0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/01/2016 to 03/17/2020**
Compliance Date Range: **03/01/2020 to 4/30/2020**
No. of Verification Resamples: **1**

MW-LF-02	03/16/2020	<0.100	n

Run Id: 6

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	Sulfate, tot	mg/L	46	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	337.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	03/16/2020	4.060	n

Run Id: 7

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	Total Dissolved Solids	mg/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	737.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	03/16/2020	93.000	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 4/30/2020
No. of Verification Resamples: 1

Run Id: 9

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	ug/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	95,400.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	03/16/2020	1,180.000	n

Run Id: 10

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	03/16/2020	3.38	n

Run Id: 12

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	45	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.54	0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/01/2016 to 03/17/2020**
Compliance Date Range: **03/01/2020 to 4/30/2020**
No. of Verification Resamples: **1**

MW-LF-03	03/16/2020	<0.100	n

Run Id: 13

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	**Sulfate, tot**	**mg/L**	**46**	**> 15% to <= 50% Substitute PQL**

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	**337.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	03/16/2020	4.200	n

Run Id: 14

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	**Total Dissolved Solids**	**mg/L**	**46**	**0% to <= 15% Substitute PQL**

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	**737.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	03/16/2020	46.000	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 4/30/2020
No. of Verification Resamples: 1

Run Id: 16

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	ug/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	95,400.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-04	03/16/2020	2,680.000	n

Run Id: 17

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-04	03/16/2020	4.76	n

Run Id: 19

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	45	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.54	0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/01/2016 to 03/17/2020**
Compliance Date Range: **03/01/2020 to 4/30/2020**
No. of Verification Resamples: **1**

MW-LF-04	03/16/2020	<0.100	n

Run Id: 20

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	**Sulfate, tot**	**mg/L**	**46**	**> 15% to <= 50% Substitute PQL**

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	**337.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-04	03/16/2020	8.050	n

Run Id: 21

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	**Total Dissolved Solids**	**mg/L**	**46**	**0% to <= 15% Substitute PQL**

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	**737.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-04	03/16/2020	68.000	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 4/30/2020
No. of Verification Resamples: 1

Run Id: 23

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	ug/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	95,400.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	03/16/2020	2,880.000	n

Run Id: 24

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	03/16/2020	8.87	n

Run Id: 26

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	45	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.54	0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/01/2016 to 03/17/2020**
Compliance Date Range: **03/01/2020 to 4/30/2020**
No. of Verification Resamples: **1**

MW-LF-05	03/16/2020	<0.100	n

Run Id: 27

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	**Sulfate, tot**	**mg/L**	**46**	**> 15% to <= 50% Substitute PQL**

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	**337.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	03/16/2020	0.760	n

Run Id: 28

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	**Total Dissolved Solids**	**mg/L**	**46**	**0% to <= 15% Substitute PQL**

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	**737.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	03/16/2020	59.000	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 4/30/2020
No. of Verification Resamples: 1

Run Id: 30

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	ug/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	95,400.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-06	03/16/2020	2,400.000	n

Run Id: 31

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-06	03/16/2020	7.54	n

Run Id: 33

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	45	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.54	0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/01/2016 to 03/17/2020**
Compliance Date Range: **03/01/2020 to 4/30/2020**
No. of Verification Resamples: **1**

MW-LF-06	03/16/2020	<0.100	n

Run Id: 34

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	Sulfate, tot	mg/L	46	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	337.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-06	03/16/2020	<0.500	n

Run Id: 35

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	Total Dissolved Solids	mg/L	46	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.56	737.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-06	03/16/2020	43.000	n

Cope Station

All Backgound Results Non-Detect

Location Id: **MW-LF-02** Run Id: 1
Parameter: **Boron, total**

Method: Double Quantification Rule
Percent ND: 100
ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	PQL	RL	Non Detect	Exceedance
03/16/2020	200.000	200.000	38.458	200.000	0.000	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-03** Run Id: 8

Parameter: **Boron, total**

Method: Double Quantification Rule
Percent ND: 100
ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	PQL	RL	Non Detect	Exceedance
03/16/2020	200.000	200.000	38.458	200.000	0.000	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-04** Run Id: 15

Parameter: **Boron, total**

Method: Double Quantification Rule
Percent ND: 100
ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	PQL	RL	Non Detect	Exceedance
03/16/2020	200.000	200.000	38.458	200.000	0.000	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-05** Run Id: 22

Parameter: **Boron, total**

Method: Double Quantification Rule
Percent ND: 100
ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	PQL	RL	Non Detect	Exceedance
03/16/2020	200.000	200.000	38.458	200.000	0.000	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-06** Run Id: 29

Parameter: **Boron, total**

Method: Double Quantification Rule
Percent ND: 100
ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	PQL	RL	Non Detect	Exceedance
03/16/2020	200.000	200.000	38.458	200.000	0.000	Y	N

All Backgound Results Non-Detect

Cope Station
Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 2
Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 04/30/2020
Compliance Locations: MW-LF-02,MW-LF-03,MW-LF-04,MW-LF-05,MW-LF-06
Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Location MW-LF-02

Run Id: 4

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data : 0% to <= 15% Substitute PQL

Sample Date	Analysis Result	Upper Limit	Result > Upper Limit	Lower Limit	Result < Lower Limit
3/16/2020	4.300	5.280	n	3.678	n

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Cope Station
Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 2
Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 04/30/2020
Compliance Locations: MW-LF-02,MW-LF-03,MW-LF-04,MW-LF-05,MW-LF-06
Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Location MW-LF-03

Run Id: 11

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data : 0% to <= 15% Substitute PQL

Sample Date	Analysis Result	Upper Limit	Result > Upper Limit	Lower Limit	Result < Lower Limit
3/16/2020	5.000	5.280	n	3.678	n

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Cope Station
Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 2
Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 04/30/2020
Compliance Locations: MW-LF-02,MW-LF-03,MW-LF-04,MW-LF-05,MW-LF-06
Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Location MW-LF-04

Run Id: 18

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data : 0% to <= 15% Substitute PQL

Sample Date	Analysis Result	Upper Limit	Result > Upper Limit	Lower Limit	Result < Lower Limit
3/16/2020	5.000	5.280	n	3.678	n

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Cope Station
Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 2
Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 04/30/2020
Compliance Locations: MW-LF-02,MW-LF-03,MW-LF-04,MW-LF-05,MW-LF-06
Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Location MW-LF-05

Run Id: 25

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data : 0% to <= 15% Substitute PQL

Sample Date	Analysis Result	Upper Limit	Result > Upper Limit	Lower Limit	Result < Lower Limit
3/16/2020	4.600	5.280	n	3.678	n

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Cope Station
Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided: 2
Background Date Range: 05/01/2016 to 03/17/2020
Compliance Date Range: 03/01/2020 to 04/30/2020
Compliance Locations: MW-LF-02,MW-LF-03,MW-LF-04,MW-LF-05,MW-LF-06
Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Location MW-LF-06

Run Id: 32

Parameter Name: Field pH, S.U.

Option for LT Pts (Compliance Data : 0% to <= 15% Substitute PQL

Sample Date	Analysis Result	Upper Limit	Result > Upper Limit	Lower Limit	Result < Lower Limit
3/16/2020	4.600	5.280	n	3.678	n

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Cope Station
Parametric Prediction Interval on Background - Compliance Analysis

User Supplied Information

Sided:	**2**
Background Date Range:	**05/01/2016 to 03/17/2020**
Compliance Date Range:	**03/01/2020 to 04/30/2020**
Compliance Locations:	**MW-LF-02,MW-LF-03,MW-LF-04,MW-LF-05,MW-LF-06**
Background Locations:	**MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Prediction Interval is based on Normal Distribution and the number of compliance periods (k).

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 1

Location ID: MW-LF-02
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: ug/L
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:	-240.003	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:	-2.807
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 2

Location ID: MW-LF-02
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: ug/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-44.044	ug/L per year
Lower Confidence Limit of Slope, M1:	-491.188	ug/L per year
Upper Confidence Limit of Slope, M2+1:	357.540	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.396
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 3

Location ID: MW-LF-02
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.70	mg/L per year
Lower Confidence Limit of Slope, M1:	-3.07	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.87	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.35
Z test:	1.64
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 4

Location ID: MW-LF-02
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.000	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.151	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.168	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.101
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 5

Location ID: MW-LF-02
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 15% to <= 50% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
Percent of ND: 44

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.006	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.011	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.012	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.728
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 6

Location ID: MW-LF-02
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.476	mg/L per year
Lower Confidence Limit of Slope, M1:	0.075	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.796	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.979
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 7

Location ID: MW-LF-02
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	5.054	mg/L per year
Lower Confidence Limit of Slope, M1:	-1.791	mg/L per year
Upper Confidence Limit of Slope, M2+1:	12.007	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.287
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 8

Location ID: MW-LF-03
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: ug/L
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:	-256.401	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:	-2.758
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 9

Location ID: MW-LF-03
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: ug/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-134.266	ug/L per year
Lower Confidence Limit of Slope, M1:	-321.496	ug/L per year
Upper Confidence Limit of Slope, M2+1:	-16.635	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.080
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 10

Location ID: MW-LF-03
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.03	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.12	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.11	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.55
Z test:	1.64
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 11

Location ID: MW-LF-03
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.097	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.103	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.244	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.718
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 12

Location ID: MW-LF-03
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.744
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 13

Location ID: MW-LF-03
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 71

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:	1.177
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 14

Location ID: MW-LF-03
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	1.864	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.284	mg/L per year
Upper Confidence Limit of Slope, M2+1:	5.860	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.275
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 15

Location ID: MW-LF-04
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: ug/L
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:	-256.401	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:	-2.758
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 16

Location ID: MW-LF-04
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: ug/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	230.928	ug/L per year
Lower Confidence Limit of Slope, M1:	-96.100	ug/L per year
Upper Confidence Limit of Slope, M2+1:	438.514	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.204
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 17

Location ID: MW-LF-04
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.37	mg/L per year
Lower Confidence Limit of Slope, M1:	0.11	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.72	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.03
Z test:	1.64
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 18

Location ID: MW-LF-04
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.167	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.013	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.254	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.327
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 19

Location ID: MW-LF-04
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.744
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 20

Location ID: MW-LF-04
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 79

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:	-0.539
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 21

Location ID: MW-LF-04
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	8.062	mg/L per year
Lower Confidence Limit of Slope, M1:	3.328	mg/L per year
Upper Confidence Limit of Slope, M2+1:	15.081	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.695
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 22

Location ID: MW-LF-05
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: ug/L
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:	-256.401	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:	-2.758
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 23

Location ID: MW-LF-05
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: ug/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	250.931	ug/L per year
Lower Confidence Limit of Slope, M1:	148.840	ug/L per year
Upper Confidence Limit of Slope, M2+1:	337.407	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.299
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 24

Location ID: MW-LF-05
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.98	mg/L per year
Lower Confidence Limit of Slope, M1:	0.83	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.25	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	4.77
Z test:	1.64
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 25

Location ID: MW-LF-05
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.000	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.200	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.177	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.112
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 26

Location ID: MW-LF-05
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.744
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 27

Location ID: MW-LF-05
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 93

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:	1.488
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 28

Location ID: MW-LF-05
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	8.777	mg/L per year
Lower Confidence Limit of Slope, M1:	5.414	mg/L per year
Upper Confidence Limit of Slope, M2+1:	13.610	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.344
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 29

Location ID: MW-LF-06
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: ug/L
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:	-256.401	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:	-2.758
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 30

Location ID: MW-LF-06
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: ug/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-218.356	ug/L per year
Lower Confidence Limit of Slope, M1:	-371.413	ug/L per year
Upper Confidence Limit of Slope, M2+1:	-65.445	ug/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.518
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 31

Location ID: MW-LF-06
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.10	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.26	mg/L per year
Upper Confidence Limit of Slope, M2+1:	-0.05	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.19
Z test:	1.64
At the 1.0 % Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 32

Location ID: MW-LF-06
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.032	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.068	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.136	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.501
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 33

Location ID: MW-LF-06
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.744
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 34

Location ID: MW-LF-06
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
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

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 35

Location ID: MW-LF-06
Confidence Level: 0.95
Date Range: 05/12/2016 to 03/16/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-2.988	mg/L per year
Lower Confidence Limit of Slope, M1:	-7.854	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.094	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.988
Z test:	1.645
At the 1.0 % Confidence Level (One-Sided Test):	None

DOMINION ENERGY
SOUTH CAROLINA

COPE STATION
CLASS III LANDFILL

ORANGEBURG COUNTY, SOUTH CAROLINA

CCR GROUNDWATER DETECTION MONITORING STATISTICAL ANALYSIS REPORT

for the

September 2020 Sampling Event

Prepared on
October 26, 2020

Dominion Energy®

STATISTICAL ANALYSIS REPORT

Groundwater Sampling

In accordance with 40 CFR Part 257.94, the 2020 second semi-annual groundwater sampling event for Detection Monitoring at the Cope Station Landfill occurred on September 18-21, 2020. This event included groundwater sampling from background monitoring wells MW-BG-06, MW-BG-16, MW-LF-01, MW-AS-01, MW-AS-02, and MW-AS-40; and the downgradient compliance monitoring wells MW-LF-02, MW-LF-03, MW-LF-04, MW-LF-05, and MW-LF06. The groundwater samples were analyzed for the constituents listed in Appendix III of the EPA CCR Rule which include Boron, Calcium, Chloride, Fluoride, pH, Sulfate, and Total Dissolved Solids.

Statistical Analysis

The statistical analysis presents no statistically significant increases above (above/below for pH) background concentrations for the CCR Rule Appendix III constituents in the groundwater samples collected from the Landfill monitoring wells during the September 2020 Detection Monitoring event.

Cope Station

Statistical Analysis Procedure

Run Id: 1

Location Id: **MW-LF-02**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total mg/L	09/21/2020	BA11259	--	--	< 0.200	n		--

Run Id: 2

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total mg/L	09/21/2020	BA11259	1 of 2	95.400	3.900	n		--

Run Id: 3

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	09/21/2020	BA11246	1 of 2	140.00	31.40	n		--

Run Id: 4

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Lower Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	09/21/2020	BA11246	1 of 2	6.110	0.000	< 0.000	n/n		--
Field pH S.U.	09/21/2020	FLD20200921	1 of 2	6.110	0.000	3.800	n/n		--

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.

Cope Station

Statistical Analysis Procedure

Run Id: 5

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	09/21/2020	BA11246	1 of 2	0.140	< 0.100	n		--

Run Id: 6

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	09/21/2020	BA11246	1 of 2	337.000	4.480	n		--

Run Id: 7

Location Id: **MW-LF-02**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	09/21/2020	BA11246	1 of 2	737.000	96.000	n		--

Run Id: 8

Location Id: **MW-LF-03**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total mg/L	09/21/2020	BA11260	--	--	< 0.200	n		--

Run Id: 9

Location Id: **MW-LF-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.

Cope Station

Statistical Analysis Procedure

Run Id: 9

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total mg/L	09/21/2020	BA11260	1 of 2	95.400	1.140	n		--

Run Id: 10

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	09/21/2020	BA11247	1 of 2	140.00	3.26	n		--

Run Id: 11

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Lower Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	09/21/2020	BA11247	1 of 2	6.110	0.000	< 0.000	n/n		--
Field pH S.U.	09/21/2020	FLD20200921	1 of 2	6.110	0.000	4.000	n/n		--

Run Id: 12

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	09/21/2020	BA11247	1 of 2	0.140	< 0.100	n		--

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.

Run Id: 13

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	09/21/2020	BA11247	1 of 2	337.000	< 0.500	n		--

Run Id: 14

Location Id: **MW-LF-03**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	09/21/2020	BA11247	1 of 2	737.000	35.000	n		--

Run Id: 15

Location Id: **MW-LF-04**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total mg/L	09/21/2020	BA11261	--	--	< 0.200	n		--

Run Id: 16

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total mg/L	09/21/2020	BA11261	1 of 2	95.400	1.620	n		--

Run Id: 17

Location Id: **MW-LF-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.

Cope Station

Statistical Analysis Procedure

Run Id: 17

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	09/21/2020	BA11248	1 of 2	140.00	4.11	n		--

Run Id: 18

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Lower Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	09/21/2020	BA11248	1 of 2	6.110	0.000	< 0.000	n/n		--
Field pH S.U.	09/21/2020	FLD20200921	1 of 2	6.110	0.000	4.000	n/n		--

Run Id: 19

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	09/21/2020	BA11248	1 of 2	0.140	< 0.100	n		--

Run Id: 20

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	09/21/2020	BA11248	1 of 2	337.000	< 0.500	n		--

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.

Run Id: 21

Location Id: **MW-LF-04**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	09/21/2020	BA11248	1 of 2	737.000	43.000	n		--

Run Id: 22

Location Id: **MW-LF-05**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total mg/L	09/18/2020	BA11253	--	--	< 0.200	n		--

Run Id: 23

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total mg/L	09/18/2020	BA11253	1 of 2	95.400	2.740	n		--

Run Id: 24

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	09/18/2020	BA11240	1 of 2	140.00	8.91	n		--

Run Id: 25

Location Id: **MW-LF-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.

Run Id: 25

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Lower Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	09/18/2020	BA11240	1 of 2	6.110	0.000	< 0.000	n/n		--
Field pH S.U.	09/18/2020	FLD20200918	1 of 2	6.110	0.000	3.800	n/n		--

Run Id: 26

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	09/18/2020	BA11240	1 of 2	0.140	< 0.100	n		--

Run Id: 27

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	09/18/2020	BA11240	1 of 2	337.000	< 0.500	n		--

Run Id: 28

Location Id: **MW-LF-05**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	09/18/2020	BA11240	1 of 2	737.000	65.000	n		--

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.

Cope Station

Statistical Analysis Procedure

Run Id: 29

Location Id: **MW-LF-06**

Compliance Test: **Double Quantification Rule**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Boron, total mg/L	09/18/2020	BA11255	--	--	< 0.200	n		--

Run Id: 30

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Calcium, Total mg/L	09/18/2020	BA11255	1 of 2	95.400	2.210	n		--

Run Id: 31

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Chloride, tot mg/L	09/18/2020	BA11242	1 of 2	140.00	7.58	n		--

Run Id: 32

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Lower Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Field pH S.U.	09/18/2020	BA11242	1 of 2	6.110	0.000	< 0.000	n/n		--
Field pH S.U.	09/18/2020	FLD20200918	1 of 2	6.110	0.000	4.100	n/n		--

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.

Cope Station

Statistical Analysis Procedure

Run Id: 33

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Fluoride, total mg/L	09/18/2020	BA11242	1 of 2	0.140	< 0.100	n		--

Run Id: 34

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Sulfate, tot mg/L	09/18/2020	BA11242	1 of 2	337.000	< 0.500	n		--

Run Id: 35

Location Id: **MW-LF-06**

Compliance Test: **Non-Parametric Prediction Interval on Background Useing largest background data value.**

Parameter	Sample Date	Lab Id	Re Testing	Upper Limit	Compliance Result	Exceedance	Possible SSI	Post-Hoc Trend
Total Dissolved Solids mg/L	09/18/2020	BA11242	1 of 2	737.000	46.000	n		--

SEP 2020

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.

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

Run Id: 2

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.63	95.400

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	09/21/2020	3.9	n

Run Id: 3

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.63	140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	09/21/2020	31.4	n

Run Id: 4

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00400	Field pH	S.U.	73	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %	One-Sided Lower Confidence Level, %	PU (Upper) Value:	PL (Lower) Value:
99.82	87.95	6.110	0.000

Location	Sample Date	Sample Result	Greater than PU (Upper)	Less than PL (Lower)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/11/2016 to 09/21/2020**
Compliance Date Range: **09/01/2020 to 9/21/2020**
No. of Verification Resamples: **1**

MW-LF-02	09/21/2020	<0	n	n
MW-LF-02	09/21/2020	3.8	n	n

Run Id: 5

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	**Fluoride, total**	**mg/L**	**49**	**> 50% to <= 100% Substitute PQL**

One-Sided Upper Confidence Level, % **99.61**

PU (Upper) Value: **0.140**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	09/21/2020	<0.1	n

Run Id: 6

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	**Sulfate, tot**	**mg/L**	**50**	**> 15% to <= 50% Substitute PQL**

One-Sided Upper Confidence Level, % **99.63**

PU (Upper) Value: **337.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	09/21/2020	4.48	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

Run Id: 7

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	Total Dissolved Solids	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 737.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-02	09/21/2020	96	n

Run Id: 9

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 95.400

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	09/21/2020	1.14	n

Run Id: 10

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

MW-LF-03	09/21/2020	3.26	n

Run Id: 11

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00400	Field pH	S.U.	73	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %	One-Sided Lower Confidence Level, %	PU (Upper) Value:	PL (Lower) Value:
99.82	87.95	6.110	0.000

Location	Sample Date	Sample Result	Greater than PU (Upper)	Less than PL (Lower)
MW-LF-03	09/21/2020	<0	n	n
MW-LF-03	09/21/2020	4	n	n

Run Id: 12

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	49	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.61	0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	09/21/2020	<0.1	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

Run Id: 13

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	Sulfate, tot	mg/L	50	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 337.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	09/21/2020	<0.5	n

Run Id: 14

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	Total Dissolved Solids	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 737.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-03	09/21/2020	35	n

Run Id: 16

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 95.400

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/11/2016** **to 09/21/2020**
Compliance Date Range: **09/01/2020** **to 9/21/2020**
No. of Verification Resamples: **1**

MW-LF-04	09/21/2020	1.62	n

Run Id: 17

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	Chloride, tot	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.63	140.00

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-04	09/21/2020	4.11	n

Run Id: 18

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00400	Field pH	S.U.	73	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %	One-Sided Lower Confidence Level, %	PU (Upper) Value:	PL (Lower) Value:
99.82	87.95	6.110	0.000

Location	Sample Date	Sample Result	Greater than PU (Upper)	Less than PL (Lower)
MW-LF-04	09/21/2020	<0	n	n
MW-LF-04	09/21/2020	4	n	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

Run Id: 19

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	49	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %: 99.61
PU (Upper) Value: 0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-04	09/21/2020	<0.1	n

Run Id: 20

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	Sulfate, tot	mg/L	50	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 337.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-04	09/21/2020	<0.5	n

Run Id: 21

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	Total Dissolved Solids	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 737.000

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/11/2016** **to 09/21/2020**
Compliance Date Range: **09/01/2020** **to 9/21/2020**
No. of Verification Resamples: **1**

MW-LF-04	09/21/2020	43	n

Run Id: 23

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	**Calcium, Total**	**mg/L**	**50**	**0% to <= 15% Substitute PQL**

One-Sided Upper Confidence Level, % **PU (Upper) Value:**

99.63 **95.400**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	09/18/2020	2.74	n

Run Id: 24

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	**Chloride, tot**	**mg/L**	**50**	**0% to <= 15% Substitute PQL**

One-Sided Upper Confidence Level, % **PU (Upper) Value:**

99.63 **140.00**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	09/18/2020	8.91	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

Run Id: 25

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00400	Field pH	S.U.	73	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %	One-Sided Lower Confidence Level, %	PU (Upper) Value:	PL (Lower) Value:
99.82	87.95	6.110	0.000

Location	Sample Date	Sample Result	Greater than PU (Upper)	Less than PL (Lower)
MW-LF-05	09/18/2020	<0	n	n
MW-LF-05	09/18/2020	3.8	n	n

Run Id: 26

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	49	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.61	0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	09/18/2020	<0.1	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

Run Id: 27

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	Sulfate, tot	mg/L	50	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 337.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	09/18/2020	<0.5	n

Run Id: 28

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	Total Dissolved Solids	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 737.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-05	09/18/2020	65	n

Run Id: 30

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00916	Calcium, Total	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 95.400

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/11/2016** **to 09/21/2020**
Compliance Date Range: **09/01/2020** **to 9/21/2020**
No. of Verification Resamples: **1**

MW-LF-06	09/18/2020	2.21	n

Run Id: 31

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00940	**Chloride, tot**	**mg/L**	**50**	**0% to <= 15% Substitute PQL**

One-Sided Upper Confidence Level, %	PU (Upper) Value:
99.63	**140.00**

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-06	09/18/2020	7.58	n

Run Id: 32

Background Locations: **MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01**

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00400	**Field pH**	**S.U.**	**73**	**> 15% to <= 50% Substitute PQL**

One-Sided Upper Confidence Level, %	One-Sided Lower Confidence Level, %	PU (Upper) Value:	PL (Lower) Value:
99.82	**87.95**	**6.110**	**0.000**

Location	Sample Date	Sample Result	Greater than PU (Upper)	Less than PL (Lower)
MW-LF-06	09/18/2020	<0	n	n
MW-LF-06	09/18/2020	4.1	n	n

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: 05/11/2016 to 09/21/2020
Compliance Date Range: 09/01/2020 to 9/21/2020
No. of Verification Resamples: 1

Run Id: 33

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00951	Fluoride, total	mg/L	49	> 50% to <= 100% Substitute PQL

One-Sided Upper Confidence Level, %: 99.61
PU (Upper) Value: 0.140

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-06	09/18/2020	<0.1	n

Run Id: 34

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00945	Sulfate, tot	mg/L	50	> 15% to <= 50% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 337.000

Location	Sample Date	Sample Result	Greater than PU (Upper)
MW-LF-06	09/18/2020	<0.5	n

Run Id: 35

Background Locations: MW-AS-40,MW-BG-06,MW-BG-16,MW-LF-01

Parameter Code	Parameter Name	Units	Background Sample Count	Option for LT Pts.
00515	Total Dissolved Solids	mg/L	50	0% to <= 15% Substitute PQL

One-Sided Upper Confidence Level, %: 99.63
PU (Upper) Value: 737.000

Location	Sample Date	Sample Result	Greater than PU (Upper)

Cope Station
Non-Parametric Prediction Interval on Background

User Supplied Information

Background Date Range: **05/11/2016** **to 09/21/2020**
Compliance Date Range: **09/01/2020** **to 9/21/2020**
No. of Verification Resamples: **1**

MW-LF-06	09/18/2020	46	n

Cope Station

All Backgound Results Non-Detect

Location Id: **MW-LF-02** Run Id: 1

Parameter: **Boron, total, mg/L**

Double Quantification Rule

Percent ND: 100

ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	RL	PQL	Non Detect	Exceedance
09/21/2020	0.200	0.0856	0.038458	0	0.2	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-03** Run Id: 8

Parameter: **Boron, total, mg/L**

Double Quantification Rule

Percent ND: 100

ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	RL	PQL	Non Detect	Exceedance
09/21/2020	0.200	0.0414	0.038458	0	0.2	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-04** Run Id: 15

Parameter: **Boron, total, mg/L**

Double Quantification Rule

Percent ND: 100

ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	RL	PQL	Non Detect	Exceedance
09/21/2020	0.200	0.2	0.038458	0	0.2	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-05** Run Id: 22

Parameter: **Boron, total, mg/L**

Double Quantification Rule

Percent ND: 100

ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	RL	PQL	Non Detect	Exceedance
09/18/2020	0.200	0.2	0.038458	0	0.2	Y	N

All Backgound Results Non-Detect

Location Id: **MW-LF-06** Run Id: 29

Parameter: **Boron, total, mg/L**

Double Quantification Rule

Percent ND: 100

ND Approach: > 50% to <= 100% Substitute PQL

Sample Date	Modified Result	Analysis Result	Detection Lmit	RL	PQL	Non Detect	Exceedance
09/18/2020	0.200	0.2	0.038458	0	0.2	Y	N

All Backgound Results Non-Detect

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 1

Location ID: MW-LF-02
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: mg/L
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:	-0.239	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:	-3.059
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 2

Location ID: MW-LF-02
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: mg/L
Percent of ND: 6

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.029	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.228	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.303	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.165
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 3

Location ID: MW-LF-02
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.13	mg/L per year
Lower Confidence Limit of Slope, M1:	-2.33	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.02	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.08
Z test:	1.64
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 4

Location ID: MW-LF-02
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 15% to <= 50% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 18

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.151	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.589	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.000	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.597
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 5

Location ID: MW-LF-02
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 15% to <= 50% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
Percent of ND: 47

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.006	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.010	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.002	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.087
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 6

Location ID: MW-LF-02
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.482	mg/L per year
Lower Confidence Limit of Slope, M1:	0.194	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.746	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.430
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 7

Location ID: MW-LF-02
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	5.893	mg/L per year
Lower Confidence Limit of Slope, M1:	0.959	mg/L per year
Upper Confidence Limit of Slope, M2+1:	11.743	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.756
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 8

Location ID: MW-LF-03
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: mg/L
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:	-0.239	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:	-3.001
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 9

Location ID: MW-LF-03
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: mg/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.077	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.220	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.023	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.485
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 10

Location ID: MW-LF-03
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.01	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.12	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.08	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	0.15
Z test:	1.64
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 11

Location ID: MW-LF-03
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 15% to <= 50% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 19

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.129	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.729	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.040	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.036
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 12

Location ID: MW-LF-03
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.579
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 13

Location ID: MW-LF-03
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 73

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:	-0.227	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:	-0.380
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 14

Location ID: MW-LF-03
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	2.266	mg/L per year
Lower Confidence Limit of Slope, M1:	0.000	mg/L per year
Upper Confidence Limit of Slope, M2+1:	5.351	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.750
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 15

Location ID: MW-LF-04
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: mg/L
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:	-0.239	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:	-3.001
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 16

Location ID: MW-LF-04
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: mg/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.139	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.025	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.404	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.386
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 17

Location ID: MW-LF-04
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.26	mg/L per year
Lower Confidence Limit of Slope, M1:	0.10	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.57	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	1.93
Z test:	1.64
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 18

Location ID: MW-LF-04
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 15% to <= 50% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 19

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.041	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.474	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.105	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.579
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 19

Location ID: MW-LF-04
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.579
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 20

Location ID: MW-LF-04
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 80

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:	-0.833
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 21

Location ID: MW-LF-04
Confidence Level: 95%
Date Range: 05/12/2016 to 09/21/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	7.113	mg/L per year
Lower Confidence Limit of Slope, M1:	3.769	mg/L per year
Upper Confidence Limit of Slope, M2+1:	10.432	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.030
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 22

Location ID: MW-LF-05
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: mg/L
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:	-0.239	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:	-3.001
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 23

Location ID: MW-LF-05
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: mg/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.221	mg/L per year
Lower Confidence Limit of Slope, M1:	0.157	mg/L per year
Upper Confidence Limit of Slope, M2+1:	0.328	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	2.672
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 24

Location ID: MW-LF-05
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	0.95	mg/L per year
Lower Confidence Limit of Slope, M1:	0.77	mg/L per year
Upper Confidence Limit of Slope, M2+1:	1.11	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	5.00
Z test:	1.64
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 25

Location ID: MW-LF-05
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 15% to <= 50% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 19

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.200	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.605	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.000	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-1.407
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 26

Location ID: MW-LF-05
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.579
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 27

Location ID: MW-LF-05
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
Percent of ND: 93

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:	-0.266	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:	-1.629
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 28

Location ID: MW-LF-05
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	9.626	mg/L per year
Lower Confidence Limit of Slope, M1:	5.935	mg/L per year
Upper Confidence Limit of Slope, M2+1:	11.999	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	3.617
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Upward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 29

Location ID: MW-LF-06
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 01022
Parameter: Boron, total
Units: mg/L
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:	-0.239	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:	-3.001
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 30

Location ID: MW-LF-06
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00916
Parameter: Calcium, Total
Units: mg/L
Percent of ND: 7

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.165	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.320	mg/L per year
Upper Confidence Limit of Slope, M2+1:	-0.044	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.672
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 31

Location ID: MW-LF-06
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00940
Parameter: Chloride, tot
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.09	mg/L per year
Lower Confidence Limit of Slope, M1:	-0.17	mg/L per year
Upper Confidence Limit of Slope, M2+1:	-0.03	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-2.08
Z test:	1.64
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 32

Location ID: MW-LF-06
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 15% to <= 50% Substitute PQL

Parameter Code: 00400
Parameter: Field pH
Units: S.U.
Percent of ND: 19

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-0.085	S.U. per year
Lower Confidence Limit of Slope, M1:	-0.422	S.U. per year
Upper Confidence Limit of Slope, M2+1:	0.031	S.U. per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.979
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 33

Location ID: MW-LF-06
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00951
Parameter: Fluoride, total
Units: mg/L
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:	0.579
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 34

Location ID: MW-LF-06
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: > 50% to <= 100% Substitute PQL

Parameter Code: 00945
Parameter: Sulfate, tot
Units: mg/L
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:	-0.265	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:	-2.285
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	Downward

Cope Station
Theil Sen Mann-Kendall Trend Analysis

Post Hoc Trend Analysis

Run Id: 35

Location ID: MW-LF-06
Confidence Level: 95%
Date Range: 05/12/2016 to 09/18/2020
Option for LT Points: 0% to <= 15% Substitute PQL

Parameter Code: 00515
Parameter: Total Dissolved Solids
Units: mg/L
Percent of ND: 0

Theil-Sen Non-parametric estimate of the slope (One-Sided Test)

Median Slope:	-1.360	mg/L per year
Lower Confidence Limit of Slope, M1:	-5.613	mg/L per year
Upper Confidence Limit of Slope, M2+1:	2.500	mg/L per year

Non-parametric Mann-Kendall Test for Trend

S Statistic:	-0.298
Z test:	1.645
At the 95% Confidence Level (One-Sided Test):	None

Cope Station
Theil Sen Mann-Kendall Trend Analysis