

2020 Annual Groundwater Monitoring and Corrective Action Report

Burlington Generating Station
Burlington, Iowa

Prepared for:

Alliant Energy



SCS ENGINEERS

25220066.00 | January 29, 2021

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OVERVIEW OF CURRENT STATUS

Burlington Generating Station, Impoundments 2020 Annual Report

In accordance with §257.90(e)(6), this section at the beginning of the annual report provides an overview of the current status of groundwater monitoring and corrective action programs for the coal combustion residual (CCR) unit. The groundwater monitoring system at the Burlington Generating Station (BGS) impoundments is a multi-unit system. Supporting information is provided in the text of the annual report.

Category	Rule Requirement	Site Status
Monitoring Status – Start of Year	(i) At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95;	Assessment
Monitoring Status – End of Year	(ii) At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in §257.94 or the assessment monitoring program in §257.95;	Assessment
Statistically Significant Increases (SSIs)	(iii) If it was determined that there was a statistically significant increase over background for one or more constituents listed in Appendix III to this part pursuant to §257.94(e):	
	(A) Identify those constituents listed in Appendix III to this part and the names of the monitoring wells associated with such an increase; and	<u>June 2020</u> Boron: MW-301, MW-302, MW-303, MW-304, MW-306, MW-307, MW-308, MW-309 Calcium: MW-302 Fluoride: MW-309 Field pH: MW-306, MW-307, MW-308 Sulfate: MW-302 <u>October 2020</u> Boron: MW-301, MW-302, MW-303, MW-304, MW-306, MW-307, MW-308, MW-309 Calcium: MW-301 Field pH: MW-304, MW-306, MW-307, MW-308 Sulfate: MW-302 Note: Includes compliance wells at waste boundary only; see Table 5 for complete results
	(B) Provide the date when the assessment monitoring program was initiated for the CCR unit.	July 16, 2018

Category	Rule Requirement	Site Status
Statistically Significant Levels (SSL) Above Groundwater Protection Standard	(iv) If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in Appendix IV to this part pursuant to §257.95(g) include all of the following:	
	(A) Identify those constituents listed in Appendix IV to this part and the names of the monitoring wells associated with such an increase;	Lithium: MW-302, MW-303, MW-307, MW-308 Molybdenum: MW-302, MW-307, MW-308, MW-312
	(B) Provide the date when the assessment of corrective measures was initiated for the CCR unit;	April 15, 2019
	(C) Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit; and	October 14, 2020 An additional public meeting will be held in 2021 prior to remedy selection.
	(D) Provide the date when the assessment of corrective measures was completed for the CCR unit.	September 12, 2019 - Original ACM November 24, 2020 – Addendum No. 1 to ACM
Selection of Remedy	(v) Whether a remedy was selected pursuant to §257.97 during the current annual reporting period, and if so, the date of remedy selection; and	Selection of remedy is in progress
Corrective Action	(vi) Whether remedial activities were initiated or are ongoing pursuant to §257.98 during the current annual reporting period.	Not applicable – Selection of Remedy is in progress

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1.0 INTRODUCTION

This 2020 Annual Groundwater Monitoring and Corrective Action Report was prepared to support compliance with the groundwater monitoring requirements of the Coal Combustion Residuals (CCR) Rule [40 CFR 257.50-107]. Specifically, this report was prepared to fulfill the requirements of 40 CFR 257.90(e). The applicable sections of the Rule are provided below in italics, followed by applicable information relative to the 2020 Annual Groundwater Monitoring and Corrective Action Report for the CCR Units. The Burlington Generating Station (BGS) site location is shown on **Figure 1**.

This report covers the period of groundwater monitoring from January 1, 2020, through December 31, 2020.

The groundwater monitoring system at the BGS impoundments is a multi-unit system. The BGS facility includes four existing CCR units:

- BGS Ash Seal Pond (existing CCR surface impoundment)
- BGS Main Ash Pond (existing CCR surface impoundment)
- BGS Economizer Ash Pond (existing CCR surface impoundment)
- BGS Upper Ash Pond (existing CCR surface impoundment)

The multi-unit system is designed to detect monitored constituents at the waste boundary of the facility as required by 40 CFR 257.91(d). The groundwater monitoring system currently consists of three upgradient monitoring wells, nine downgradient compliance wells at the waste boundary, and five additional downgradient delineation wells (**Figure 2** and **Table 1**).

2.0 BACKGROUND

To provide context for the annual report, the following background information is provided in this section of the report, prior to the annual report sections:

- Geologic and hydrogeologic setting
- CCR Rule monitoring system

2.1 GEOLOGIC AND HYDROGEOLOGIC SETTING

2.1.1 Regional Information

The uppermost geologic formation beneath the Burlington plant that meets the definition of the “uppermost aquifer,” as defined under 40 CFR 257.53, is the surficial alluvial aquifer. The alluvial aquifer is comprised of Mississippi River valley clay, silt, sand, and sand and gravel deposits. This deposit is present along the edges of the entire Mississippi River valley in southeastern Iowa. A map of the regional glacial geology in the area is included in **Appendix A**.

The alluvial aquifer is underlain by Mississippian limestone bedrock. A bedrock geology map of the area is located in **Appendix A**. The limestone bedrock is also an aquifer and is likely hydraulically connected to the alluvial aquifer above.

The regional groundwater flow direction is generally east, from the bedrock uplands west of the site toward the Mississippi River. A map of regional flow in the Mississippian aquifer is included in **Appendix A**.

2.1.2 Site Information

Monitoring wells MW-301 through MW-311 were installed to intersect the surficial alluvium aquifer at the site. The unconsolidated material at these well locations is generally clay and silt to approximately 20 feet below ground surface, and these fine-grained sediments are underlain by sand or silty sand. The total boring depths were between 24 and 34 feet and bedrock was not encountered in any boring. Boring logs, well construction and development documentation for MW-301 through MW-311 are included in **Appendix B**.

Monitoring wells MW-312 and MW-313 were installed in May 2019 as delineation wells to assess the downgradient extent of groundwater impacts. Both wells were installed near the Mississippi River. Both monitoring wells are screened near the top of the alluvial sands, below a confining clay layer. The total boring depths were 26 feet at MW-312 and 32 feet at MW-313. Boring logs, well construction and development documentation for MW-312 and MW-313 are included in **Appendix B**.

Monitoring wells MW-302A, MW-307A, and MW-313A were installed in June and July 2020 as additional delineation wells to assess the downgradient vertical extent of groundwater impacts. They were installed as nested wells with MW-302, MW-307, and MW-313. Monitoring well MW-310A was installed in nest with upgradient well MW-310 to provide additional background groundwater information. The boring for well MW-310A encountered bedrock at 25 feet and the wells screened in Mississippian mudstone. The three downgradient delineation wells are screened in the alluvial sands. Total boring depths ranged from 50 to 62 feet. Boring logs, well construction and development documentation for MW-302A, MW-307A, MW-310A, and MW-313A are included in **Appendix B**.

Shallow groundwater at the site generally flows to the east and southeast, toward the Mississippi River. The groundwater flow pattern in June 2020 is shown on **Figure 3**, and the groundwater flow pattern of the September 2020 sampling is shown on **Figure 4**. The groundwater elevation data for the CCR monitoring wells are provided in **Table 3**. Estimated horizontal gradients and flow velocities are provided on **Table 4A**. Calculated vertical gradients for the nested wells are provided in **Table 4B**.

2.2 CCR RULE MONITORING SYSTEM

The groundwater monitoring system initially established in accordance with the CCR Rule consists of two upgradient (background) monitoring wells and nine downgradient monitoring wells. The background wells include MW-310 and MW-311. The nine downgradient wells include MW 301, MW-302, MW-303, MW304, MW-305, MW-306, MW-307, MW-308, and MW-309. The CCR Rule wells are installed in the upper portion of the alluvial aquifer. Well depths range from approximately 19 to 35 feet, measured from the top of the well casing.

The shallow downgradient delineation monitoring wells include MW-312 and MW-313. The deeper downgradient piezometers include MW-302A, MW-307A, and MW-313A. Upgradient piezometer MW-310A was also installed to assist with the selection of remedy process. Shallow monitoring well depths range from approximately 19 to 33 feet, measured from the top of the well casing. The piezometer depths range from approximately 49 to 63 feet, measured from top of well casing.

3.0 §257.90(E) ANNUAL REPORT REQUIREMENTS

Annual groundwater monitoring and corrective action report. For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by §257.105(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

3.1 §257.90(e)(1) Site Map

A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

A map of the site location is provided on **Figure 1**. A map with an aerial image showing the CCR units and all background (or upgradient) and downgradient monitoring wells with identification numbers for the groundwater monitoring program is provided as **Figure 2**.

3.2 §257.90(E)(2) MONITORING SYSTEM CHANGES

Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

Four monitoring wells, MW-302A, MW-307A, MW-310A, and MW-313A, were installed between June 26 and July 1, 2020, to characterize site conditions in accordance with §257.95(g)(1). The boring logs and well construction forms are provided in **Appendix B**.

3.3 §257.90(E)(3) SUMMARY OF SAMPLING EVENTS

In addition to all the monitoring data obtained under §§257.90 through 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

Three groundwater sampling events were completed in 2020. The two semiannual sampling events were completed in June 2020 and October 2020 as required by the assessment monitoring program. The first semiannual event was completed in June rather than April due to access restrictions associated with the COVID-19 pandemic. Initial samples for the four newly installed monitoring wells were collected in September 2020. The new monitoring wells were also sampled in October 2020, as part of the second semiannual sampling event. A summary including the number of groundwater samples that were collected for analysis for each background and downgradient well,

the dates the samples were collected, and whether the sample was required by the detection or assessment monitoring programs is included in **Table 2**.

Groundwater samples collected in the June, September, and October 2020 sampling events were analyzed for both Appendix III and Appendix IV constituents and the results are summarized in **Table 5**. Field parameter results for the 2020 sampling events are provided in **Table 6**. The analytical laboratory reports for 2020 are provided in **Appendix C**. Historical results for each monitoring well are summarized in **Appendix D**.

Supplemental groundwater quality parameters were included in the monitoring program in October 2020 to support the selection of remedy process, including evaluation of monitored natural attenuation (MNA). The results for the supplemental parameters are also included in **Table 5**, in the laboratory reports in **Appendix C**, and in the historical results tables in **Appendix D**.

3.4 \$257.90(E)(4) MONITORING TRANSITION NARRATIVE

A narrative discussion of any transition 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);

There was no monitoring program transition in 2020.

An Assessment of Corrective Measures (ACM) was initiated for the BGS CCR Units on April 15, 2019. The ACM was completed on September 12, 2019. The selection of remedy is in progress. The ACM was initiated in response to the detection of lithium and molybdenum at a statistically significant level exceeding the Groundwater Protection Standards (GPS). Assessment monitoring continued during the ACM and will continue during the selection of remedy and implementation of the corrective action program.

In accordance with the Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities (USEPA, 2009), the comparison of assessment monitoring results to the GPS was based on the lower confidence limit (LCL) for the arithmetic mean. The LCL evaluation was completed for the Appendix IV parameters that have been detected at a concentration exceeding the GPS in at least one sample result since assessment monitoring was initiated, which include lithium and molybdenum. The LCLs were calculated with Sanitas™ using historical concentrations measured since assessment monitoring began in August 2018. The most recent LCL evaluation, completed for the October 2020 event, is provided in **Appendix E**.

Based on the LCL evaluation, statistically significant levels (SSLs) above the GPS were identified for the following parameters and wells:

- Lithium: MW-302, MW-303, MW-307, MW-308
- Molybdenum: MW-302, MW-307, MW-308, MW-312

The SSLs for lithium at MW-302, MW-303, MW-307, and MW-308 and for molybdenum at MW-302, MW-307, and MW-308 are consistent with previous SSL determinations. The SSL for molybdenum at MW-312 is a newly identified SSL, because this well was installed more recently and has now been sampled four times, which is the minimum required for LCL evaluation.

Molybdenum was detected at concentrations exceeding the GPS in samples from the new piezometers (“A” wells) during the September and October 2020 sampling events (**Table 5**). Once

four rounds of sampling have been completed at these locations, evaluation of the LCL for the mean concentration will be used to determine if SSLs for molybdenum are present at these wells.

3.5 §257.90(E)(5) OTHER REQUIREMENTS

Other information required to be included in the annual report as specified in §§257.90 through 257.98.

Additional potentially applicable requirements for the annual report, and the location of the requirement within the Rule, are provided in the following sections. For each cited section of the Rule, the portion referencing the annual report requirement is provided below in italics, followed by applicable information relative to the 2020 Annual Groundwater Monitoring and Corrective Action Report.

3.5.1 §257.90(e) General Requirements

For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year.

Status of Groundwater Monitoring and Corrective Action Program. The groundwater monitoring and corrective action program is currently in the selection of remedy process, with assessment monitoring continuing.

Summary of Key Actions Completed:

- Statistical evaluation of the October 2019 assessment monitoring event completed on January 15, 2020.
- Two semiannual assessment monitoring events (June and October 2020).
- Statistical evaluation for the June 2020 assessment monitoring event, completed August 14, 2020.
- Four piezometers were installed in June and July 2020 to further delineate the groundwater monitoring network and to assist with the selection of remedy process.
- Semiannual progress reports for the Selection of Remedy process (March and September 2020).
- Supplemental groundwater monitoring event in September 2020 to characterize groundwater quality at selected wells installed to delineate the nature and extent of impacts.
- Initial public meeting held for the ACM (October 14, 2020).
- ACM addendum completed (November 25, 2020).

Description of Any Problems Encountered:

- No problems were encountered during the groundwater sampling events in 2020.

Discussion of Actions to Resolve the Problems:

- Not applicable.

Projection of Key Activities for the Upcoming Year (2021):

- Statistical evaluation and determination of any statistically significant levels exceeding the GPS for the October 2020 monitoring event (January 2021).
- Statistical evaluation and determination of any statistically significant levels exceeding the GPS for the April 2021 monitoring event (July 2021).
- Continued work on the selection of remedy in accordance with §257.97.
- An additional public meeting will be held in 2021 prior to remedy selection.
- Two semiannual assessment monitoring events (April and October 2021).

3.5.2 §257.94(d) Alternative Detection Monitoring Frequency

The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by § 257.90(e).

Not applicable. BGS is no longer in the detection monitoring program.

3.5.3 §257.94(e)(2) Alternative Source Demonstration for Detection Monitoring

The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

Not applicable. BGS is no longer in the detection monitoring program.

3.5.4 §257.95(c) Alternative Assessment Monitoring Frequency

The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by §257.90(e).

Not applicable. Assessment monitoring has been initiated at the site but no alternative assessment monitoring frequency has been proposed at this time.

3.5.5 §257.95(d)(3) Assessment Monitoring Results and Standards

Include the recorded concentrations required by paragraph (d)(1) of this section, identify the background concentrations established under § 257.94(b), and identify the groundwater protection standards established under paragraph (d)(2) of this section in the annual groundwater monitoring and corrective action report required by §257.90(e).

The 2020 assessment monitoring results, background upper prediction limits (UPLs), and GPSs established for BGS are provided in **Table 5**. The laboratory reports are provided in **Appendix C**. Historical monitoring results are summarized in **Appendix D**.

Supplemental groundwater quality parameters were included in the monitoring program in 2020 to support the selection of remedy process, including the evaluation of MNA. The results for the supplemental parameters are included in **Table 5** and in the laboratory reports in **Appendix C**.

3.5.6 §257.95(g)(3)(ii) Alternative Source Demonstration for Assessment Monitoring

The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

Not applicable. No alternative source demonstration evaluation for assessment monitoring was completed in 2020.

3.5.7 §257.96(a) Extension of Time for Corrective Measures Assessment

The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measure due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by §257.90(e), in addition to the certification by a qualified professional engineer.

The ACM was initiated on April 15, 2019. The certification demonstrating the need for a 90-day deadline extension was completed on July 10, 2019, and was included in the 2019 annual groundwater monitoring and corrective action report. The ACM was completed on September 12, 2019. Addendum No. 1 to the ACM was completed on November 25, 2020.

3.6 §257.90(E)(6) OVERVIEW

A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit.

The specific requirements for the overview under §257.90(e)(6) are listed and the information is provided at the beginning of this report, before the Table of Contents.

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**Table 1. Groundwater Monitoring Well Network
Burlington Generating Station / SCS Engineers Project #25220066.00**

Monitoring Well	Location in Monitoring Network	Role in Monitoring Network
MW-301	Downgradient	Compliance
MW-302	Downgradient	Compliance
MW-302A	Downgradient, deeper	Delineation
MW-303	Downgradient	Compliance
MW-304	Downgradient	Compliance
MW-305	Downgradient	Compliance
MW-306	Downgradient	Compliance
MW-307	Downgradient	Compliance
MW-307A	Downgradient, deeper	Delineation
MW-308	Downgradient	Compliance
MW-309	Downgradient	Compliance
MW-310	Upgradient	Background
MW-310A	Downgradient, deeper	Background
MW-311	Upgradient	Background
MW-312	Downgradient	Delineation
MW-313	Downgradient	Delineation
MW-313A	Downgradient, deeper	Delineation

Created by: RM
 Last revision by: RM
 Checked by: TK

Date: 12/14/2020
 Date: 1/11/2021
 Date: 1/20/2021

**Table 2. CCR Rule Groundwater Samples Summary
Burlington Generating Station
SCS Engineers Project #25220066.00**

Sample Dates	Compliance wells		Delineation Well	Compliance wells					Delineation Well	Compliance wells		Delineation Well			Background Well	Delineation Well	Background Well
	MW-301	MW-302	MW-302A	MW-303	MW-304	MW-305	MW-306	MW-307	MW-307A	MW-308	MW-309	MW-312	MW-313	MW-313A	MW-310	MW-310A	MW-311
6/2-4/2020	A	A	NI	A	A	A	A	A	NI	A	A	A	A	NI	A	NI	A
9/9/2020	--	--	A	--	--	--	--	--	A	--	--	--	--	A	--	A	--
10/14-16/2020	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Total Samples	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Abbreviations:

A = Assessment Monitoring Program

NI = Not Installed

Created by: TK Date: 12/29/2017
 Last revision by: RM Date: 1/11/2021
 Checked by: NDK Date: 1/21/2021

Table 3. Groundwater Elevation Summary
Burlington Generating Station / SCS Engineers Project #25220066.00

Well Number	MW-301	MW-302	MW-302A	MW-303	MW-304	MW-305	MW-306	MW-307	MW-307A	MW-308	MW-309	MW-310	MW-310A	MW-311	MW-312	MW-313	MW-313A
Top of Casing Elevation (feet amsl)	538.38	535.69	535.89	533.60	534.42	533.28	536.92	536.96	536.22	537.20	536.42	531.99	532.53	532.32	536.43	535.82	536.03
Screen Length (ft)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Total Depth (ft from top of casing)	31.90	29.95	62.55	28.59	25.27	29.43	34.41	28.64	61.93	30.31	27.31	18.76	48.8	22.63	27.70	32.97	63.38
Top of Well Screen Elevation (ft)	511.48	510.74	478.34	510.01	514.15	508.85	507.51	513.32	479.29	511.89	514.11	518.23	488.73	514.69	513.73	507.85	477.65
Measurement Date																	
April 20, 2016	522.63	521.91	NI	521.76	521.78	521.96	521.74	522.38	NI	521.93	522.09	525.43	NI	523.72	NM	NM	NI
June 6 & 7, 2016	521.07	521.21	NI	521.26	521.28	521.48	521.43	521.75	NI	521.43	521.39	524.13	NI	521.80	NM	NM	NI
August 16 & 17, 2016	521.81	521.35	NI	521.31	521.37	521.46	521.53	521.91	NI	521.56	521.70	524.84	NI	522.92	NM	NM	NI
October 3, 2016	527.48	527.54	NI	527.57	527.57	527.71	527.67	527.81	NI	527.62	527.57	527.58	NI	527.34	NM	NM	NI
January 9 & 10, 2017	525.38	525.50	NI	525.56	525.62	525.74	525.67	525.81	NI	525.65	525.57	525.78	NI	525.16	NM	NM	NI
April 3 & 4, 2017	523.08	522.84	NI	522.81	522.87	523.03	523.07	523.14	NI	523.07	523.10	525.52	NI	524.01	NM	NM	NI
June 12 & 13, 2017	523.21	522.84	NI	522.80	522.90	522.78	522.87	523.17	NI	522.90	522.91	524.94	NI	523.55	NM	NM	NI
August 15 & 16, 2017	519.96	519.39	NI	519.30	519.23	519.93	519.82	520.16	NI	519.80	519.93	523.89	NI	521.12	NM	NM	NI
October 16, 2017	522.13	522.20	NI	522.23	522.32	522.48	522.72	522.55	NI	522.46	522.67	525.49	NI	523.44	NM	NM	NI
May 8 & 9, 2018	525.51	525.81	NI	525.80	525.85	526.06	526.00	526.06	NI	525.62	525.54	525.79	NI	525.08	NM	NM	NI
August 13 & 14, 2018	520.19	519.87	NI	519.78	519.81	520.29	520.14	520.46	NI	520.22	520.22	523.69	NI	521.06	NM	NM	NI
October 9 & 10, 2018	528.01	528.08	NI	528.78	528.82	528.97	528.95	529.08	NI	528.98	528.93	529.00	NI	528.49	NM	NM	NI
March 11, 2019	523.38	522.83	NI	522.74	522.80	NM	523.21	523.49	NI	523.13	NM	NM	NI	NM	NM	NM	NI
April 3, 2019	528.15	528.21	NI	528.22	528.27	528.36	528.40	528.63	NI	528.39	528.40	528.62	NI	528.20	NM	NM	NI
June 6, 2019	530.70	531.02	NI	531.00	531.04	TOC	531.19	531.38	NI	531.15	531.08	531.48	NI	531.07	531.08	531.05	NI
October 10 & 11, 2019	526.80	526.88	NI	526.87	526.97	527.03	527.22	527.45	NI	527.08	527.02	526.25	NI	526.68	526.97	526.97	NI
June 2-4, 2020	523.94	523.98	NI	523.97	524.02	524.12	524.45	524.62	NI	524.10	524.06	525.36	NI	524.05	524.05	524.02	NI
September 9, 2020	519.90	519.79	519.71	519.73	519.83	520.00	520.14	520.41	519.97	520.11	520.13	524.13	509.16	520.87	519.85	519.83	519.76
October 14-16 & 19, 2020	519.26	518.94	518.79	518.78	518.69	519.00	519.05	519.33	519.00	519.02	519.28	523.81	489.84	520.59	518.68	518.70	518.61
Bottom of Well Elevation (ft)	506.48	505.74	473.34	505.01	509.15	503.85	502.51	508.32	474.29	506.89	509.11	513.23	483.73	509.69	508.73	502.85	472.65

Notes:
 NM = not measured
 TOC = top of casing
 NI = not installed

Created by: KAK _____
 Last revision by: RM _____
 Checked by: TK _____
 Proj Mgr QA/QC: TK _____

Date: 6/15/2016
 Date: 1/11/2021
 Date: 1/23/2021
 Date: 1/23/2021

Table 4A. Horizontal Gradients and Flow Velocity Table
Burlington Generating Station
SCS Engineers Project #25220066.00
January - December 2020

South					
Sampling Dates	h1 (ft)	h2 (ft)	Δl (ft)	Δh/Δl (ft/ft)	V (ft/d)
6/2-4/2020	524.00	523.94	573.00	0.0001	0.02
9/9/2020	520.13	519.9	828	0.0003	0.07

Southeast					
Sampling Dates	h1 (ft)	h2 (ft)	Δl (ft)	Δh/Δl (ft/ft)	V (ft/d)
9/9/2020	520.11	519.83	645	0.0004	0.10

Well	K Values (cm/sec)	K Values (ft/d)	Assumed Porosity, n
MW-301	1.6E-03	4.4	
MW-302	2.9E-02	82	
MW-302A	4.9E-02	140	
MW-303	8.3E-03	24	
MW-304	6.0E-02	171	
MW-305	6.1E-02	173	
MW-306	1.0E-01	295	
MW-307	8.5E-03	24	
MW-307A	4.1E-02	116	
MW-308	7.6E-02	215	
MW-309	1.2E-02	34	
MW-310	3.7E-02	104	
MW-310A	pending	pending	
MW-311	9.1E-03	26	
MW-312	6.6E-02	187	
MW-313	1.1E-01	298	
MW-313A	1.2E-01	334	
Geometric Mean	3.3E-02	94	

Notes:

- MW-310A K value is pending.
- MW-310 and MW-311 are background wells and are not included in geometric mean calculation.

Groundwater flow velocity equation: $V = [K * (\Delta h / \Delta l)] / n$

ft = feet

ft/d = feet per day

K = hydraulic conductivity

n = effective porosity

V = groundwater flow velocity

h1, h2 = point interpreted

groundwater elevation at

Δl = distance between location 1 and 2

Δh/Δl = hydraulic gradient

Created by: RM
 Last revision by: RM
 Checked by: TK

Date: 12/29/2020
 Date: 1/18/2021
 Date: 1/22/2021

Table 4B. Vertical Gradients
Burlington Generating Station / SCS Engineers Project #25220066.00
2020

Vertical Hydraulic Gradients	MW302/MW302A		MW307/MW307A		MW310/MW310A		MW313/MW313A	
	Shallow Well	MW302		MW307		MW310		MW313
Screen midpoint (feet amsl)	508.24		510.82		518.23		505.35	
Deep Well	MW302A		MW307A		MW310A		MW313A	
Screen midpoint (feet amsl)	475.84		476.79		486.23		475.15	
Measurement Date	Distance between midpoints (feet)	Vertical Gradient (ft/ft)	Distance between midpoints (feet)	Vertical Gradient (ft/ft)	Distance between midpoints (feet)	Vertical Gradient (ft/ft)	Distance between midpoints (feet)	Vertical Gradient (ft/ft)
September 9, 2020	32.4	-0.002	34.0	-0.013	32.0	-0.468	30.2	-0.002
October 19, 2020	32.4	-0.005	34.0	-0.010	32.0	-1.062	30.2	-0.003

Notes:

1: A positive vertical gradient indicates upward groundwater flow. A negative gradient indicates downward flow.

Created by:	<u>TK</u>	Date:	<u>10/23/2020</u>
Last revision by:	<u>RM</u>	Date:	<u>1/20/2021</u>
Checked by:	<u>MDB</u>	Date:	<u>1/20/2021</u>
Checked by PM:	<u>TK</u>	Date:	<u>1/22/2021</u>

**Table 5. Groundwater Analytical Results Summary
Burlington Generating Station, Burlington, Iowa
SCS Engineers Project #25220066.00**

Parameter Name	UPL Method	UPL	GPS	Background Wells						Compliance Wells				Delineation Well			
				MW-310		MW-310A		MW-311		MW-301		MW-302		MW-302A		MW-303	
				6/2/2020	10/14/2020	9/9/2020	10/16/2020	6/2/2020	10/14/2020	6/3/2020	10/16/2020	6/3/2020	10/16/2020	9/9/2020	10/16/2020	6/3/2020	10/16/2020
Appendix III																	
Boron, ug/L	NP	2,950		500	290	2,200	1,200	2,500	3,500	10,000	12,000	13,000	11,000	11,000	11,000	23,000	19,000
Calcium, mg/L	P	210		130	92	150	62	190	140	140	220	210	200	120	130	120	120
Chloride, mg/L	P	209		87	17	18	16	120	61	22	20	12	10	27	23	18	17
Fluoride, mg/L	P	0.427		0.65	<0.23	0.27 J	<0.23	0.64	<0.23	0.26 J	<0.23	<0.23	<0.23	<0.23	<0.23	0.27 J	<0.23
Field pH, Std. Units	P	8.17		7.30	7.34	7.33	NA	7.10	7.41	6.99	7.07	7.88	7.87	7.31	7.26	7.12	7.19
Sulfate, mg/L	P	457		100	19	100	130	220	110	250	170	490	460	340	330	100	190
Total Dissolved Solids, mg/L	P	1,113		590	390	570	620	950	640	910	970	1,000	910	730	710	640	630
Appendix IV																	
Antimony, ug/L	P*	0.17	6	<0.58	1.9	1.1	1.5	<0.58	<0.51	<0.58	<0.51	<0.58	<0.51	<0.51	1.7	<0.58	0.57 J
Arsenic, ug/L**	P	114.9	114.9	55	63	15	5.1	19	15	46	54	110	76	2.9	2.9	18	14
Barium, ug/L	P	1,147	2,000	550	400	290	90	300	220	330	500	340	250	270	280	610	480
Beryllium, ug/L	NP*	0.036	4	<0.27	<0.27	2.3	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
Cadmium, ug/L	NP*	0.025	5	<0.039	<0.049	0.69	0.062 J	<0.039	<0.049	<0.039	<0.049	0.045 J	0.11	<0.049	0.065 J	<0.039	<0.049
Chromium, ug/L	P*	0.090	100	<1.1	<1.1	5.4	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt, ug/L	P	3.87	6	2.3	1.5	28	3.4	0.81	0.28 J	0.31 J	0.7	0.21 J	0.26 J	0.12 J	0.11 J	0.56	0.49 J
Fluoride, mg/L	P	0.427	4	0.65	<0.23	0.27 J	<0.23	0.64	<0.23	0.26 J	<0.23	<0.23	<0.23	<0.23	<0.23	0.27 J	<0.23
Lead, ug/L	NP*	0.64	15	<0.27	<0.11	20	3.5	1.1	<0.11	<0.27	<0.11	<0.27	0.17 J	0.11 J	<0.11	0.29 J	0.18 J
Lithium, ug/L	NP*	7.7	40	<2.3	<2.5	32	36	<2.3	<2.5	16	10	55	64	11	11	48	59
Mercury, ug/L	DQ	DQ	2	<0.10	<0.10	<0.10	<0.10	0.13 J	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Molybdenum, ug/L	NP	14.7	100	5.8	3.6	19	33	11	23	110	67	140	130	120	110	66	84
Selenium, ug/L	P*	0.28	50	<1.0	<1.0	1.5 J	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	1.1 J	<1.0	<1.0	<1.0	<1.0
Thallium, ug/L	NP*	0.35	2	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA
Radium 226/228 Combined, pCi/L	P	3.36	5	0.844	0.552	4.91	0.878	0.802	0.297	0.928	1.00	0.626	0.245	1.15	0.785	0.892	1.26
Additional Parameters for Selection of Remedy																	
Lithium, dissolved, # ug/L	UPL or GPS not applicable			NA	NA	NA	NA	NA	NA	NA	NA	NA	64.0	NA	NA	NA	59.0
Iron, dissolved, # ug/L				NA	16,000	NA	<50.0	NA	16,000	NA	34,000	NA	3,200	NA	8,600	NA	8,700
Iron, ug/L				NA	18,000	NA	1,600	NA	16,000	NA	34,000	NA	2,900	NA	8,400	NA	8,500
Magnesium, ug/L				NA	24,000	NA	25,000	NA	30,000	NA	63,000	NA	18,000	NA	28,000	NA	21,000
Manganese, dissolved, # ug/L				NA	4,000	NA	420	NA	4,300	NA	13,000	NA	1,600	NA	3,800	NA	3,900
Manganese, ug/L				NA	4,400	NA	470	NA	4,200	NA	12,000	NA	1,400	NA	3,600	NA	3,700
Molybdenum, dissolved, # ug/L				NA	NA	NA	NA	NA	NA	NA	66.0	NA	120	NA	120	NA	85.0
Potassium, ug/L				NA	2,700	NA	6,900	NA	2,300	NA	4,100	NA	12,000	NA	3,600	NA	22,000
Sodium, ug/L				NA	13,000	NA	140,000	NA	36,000	NA	45,000	NA	24,000	NA	34,000	NA	30,000
Bicarbonate Alkalinity, mg/L				NA	330	NA	410	NA	380	NA	760	NA	240	NA	150	NA	290
Carbonate Alkalinity, mg/L				NA	<3.80	NA	<3.8	NA	<3.80	NA	<3.80	NA	<3.80	NA	<3.80	NA	<3.80
Total Alkalinity, mg/L				NA	330	NA	410	NA	380	NA	760	NA	240	NA	150	NA	290

4.4
30.8
17

Blue highlighted cell indicates the compliance well result exceeds the UPL (background) and the LOQ.

Yellow highlighted cell indicates the compliance well result exceeds the GPS.

Grayscale indicates Additional Parameters sampled for selection of remedy and evaluation of Monitored Natural Attenuation.

**Table 5. Groundwater Analytical Results Summary
Burlington Generating Station, Burlington, Iowa
SCS Engineers Project #25220066.00**

Parameter Name	UPL Method	UPL	GPS	Background Wells				Compliance Wells						Compliance Well					
				MW-310		MW-310A		MW-311		MW-304		MW-305		MW-306		MW-307			
				6/2/2020	10/14/2020	9/9/2020	10/16/2020	6/2/2020	10/14/2020	6/3/2020	10/15/2020	6/3/2020	10/15/2020	6/4/2020	10/15/2020	6/4/2020	10/15/2020		
Appendix III																			
Boron, ug/L	NP	2,950		500	290	2,200	1,200	2,500	3,500	6,400	7,400	2,200	2,400	3,200	3,200	3,600	3,400		
Calcium, mg/L	P	210		130	92	150	62	190	140	150	150	120	120	41	37	37	36		
Chloride, mg/L	P	209		87	17	18	16	120	61	21	21	36	32	21	18	21	17		
Fluoride, mg/L	P	0.427		0.65	<0.23	0.27 J	<0.23	0.64	<0.23	<0.23	<0.23	0.45 J	<0.23	<0.23	<0.23	<0.23	<0.23		
Field pH, Std. Units	P	8.17		7.30	7.34	7.33	NA	7.10	7.41	7.23	8.46	7.12	7.23	10.48	10.0	10.03	10.05		
Sulfate, mg/L	P	457		100	19	100	130	220	110	250	420	33	54	120	71.0	180	160		
Total Dissolved Solids, mg/L	P	1,113		590	390	570	620	950	640	750	820	640	600	320	300	390	370		
Appendix IV																			
Antimony, ug/L	P*	0.17	6	<0.58	1.9	1.1	1.5	<0.58	<0.51	<0.58	0.52 J	<0.58	<0.51	1.1	0.90 J	<0.58	0.56 J		
Arsenic, ug/L**	P	114.9	114.9	55	63	15	5.1	19	15	35	49	<0.88	<0.88	50	46	47	47		
Barium, ug/L	P	1,147	2,000	550	400	290	90	300	220	220	170	230	250	16	16	36	39		
Beryllium, ug/L	NP*	0.036	4	<0.27	<0.27	2.3	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27		
Cadmium, ug/L	NP*	0.025	5	<0.039	<0.049	0.69	0.062 J	<0.039	<0.049	<0.039	<0.049	<0.039	<0.049	<0.039	<0.049	0.044 J	<0.049		
Chromium, ug/L	P*	0.090	100	<1.1	<1.1	5.4	<1.1	<1.1	<1.1	<1.1	<4.4	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1		
Cobalt, ug/L	P	3.87	6	2.3	1.5	28	3.4	0.81	0.28 J	0.15 J	<0.36	0.18 J	0.15 J	<0.091	<0.091	<0.091	<0.091		
Fluoride, mg/L	P	0.427	4	0.65	<0.23	0.27 J	<0.23	0.64	<0.23	<0.23	<0.23	0.45 J	<0.23	<0.23	<0.23	<0.23	<0.23		
Lead, ug/L	NP*	0.64	15	<0.27	<0.11	20	3.5	1.1	<0.11	<0.27	<0.11	<0.27	<0.11	0.33 J	0.43 J	<0.27	0.19 J		
Lithium, ug/L	NP*	7.7	40	<2.3	<2.5	32	36	<2.3	<2.5	47	92	28	34	43	42	48	51		
Mercury, ug/L	DQ	DQ	2	<0.10	<0.10	<0.10	<0.10	0.13 J	<0.10	0.11 J, F1	<0.10	0.12 J	<0.10	0.10 J	<0.10	0.12 J	<0.10		
Molybdenum, ug/L	NP	14.7	100	5.8	3.6	19	33	11	23	45	140	<1.1	1.1 J	86	82	130	140		
Selenium, ug/L	P*	0.28	50	<1.0	<1.0	1.5 J	<0.10	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
Thallium, ug/L	NP*	0.35	2	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA		
Radium 226/228 Combined, pCi/L	P	3.36	5	0.844	0.552	4.91	0.878	0.802	0.297	0.573	0.304	0.759	0.550	0.0769	0.119	0.277	0.180		
Additional Parameters for Selection of Remedy																			
Lithium, dissolved, # ug/L	UPL or GPS not applicable			NA	NA	NA	NA	NA	NA	NA	93.0	NA	NA	NA	42	NA	50.0		
Iron, dissolved, # ug/L				NA	16,000	NA	<50.0	NA	16,000	NA	720	NA	3,000	NA	<50.0	NA	<50.0	NA	<50.0
Iron, ug/L				NA	18,000	NA	1,600	NA	16,000	NA	660	NA	3,000	NA	<50.0	NA	<50.0	NA	<50.0
Magnesium, ug/L				NA	24,000	NA	25,000	NA	30,000	NA	3,800	NA	26,000	NA	<100	NA	<100	NA	<100
Manganese, dissolved, # ug/L				NA	4,000	NA	420	NA	4,300	NA	440	NA	2,900	NA	<4.0	NA	6.60 J	NA	6.60 J
Manganese, ug/L				NA	4,400	NA	470	NA	4,200	NA	380	NA	2,800	NA	5.4 J	NA	6.40 J	NA	6.40 J
Molybdenum, dissolved, # ug/L				NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	NA	NA	NA	NA	140
Potassium, ug/L				NA	2,700	NA	6,900	NA	2,300	NA	14,000	NA	5,700	NA	20,000	NA	36,000	NA	36,000
Sodium, ug/L				NA	13,000	NA	140,000	NA	36,000	NA	51,000	NA	54,000	NA	46,000	NA	54,000	NA	54,000
Bicarbonate Alkalinity, mg/L				NA	330	NA	410	NA	380	NA	130	NA	470	NA	52	NA	<1.90	NA	<1.90
Carbonate Alkalinity, mg/L				NA	<3.80	NA	<3.8	NA	<3.80	NA	<3.80	NA	<3.80	NA	82	NA	79.0	NA	79.0
Total Alkalinity, mg/L				NA	330	NA	410	NA	380	NA	130	NA	470	NA	130	NA	84.0	NA	84.0

4.4
30.8
17

Blue highlighted cell indicates the compliance well res
Yellow highlighted cell indicates the compliance well re
Grayscale indicates Additional Parameters sampled for

Blue highlighted cell indi
Yellow highlighted cell ir
Grayscale indicates Adc

**Table 5. Groundwater Analytical Results Summary
Burlington Generating Station, Burlington, Iowa
SCS Engineers Project #25220066.00**

Parameter Name	UPL Method	UPL	GPS	Background Wells				Delineation Well				Compliance Well					
				MW-310		MW-310A		MW-311		MW-307A		MW-308		MW-309		MW-312	
				6/2/2020	10/14/2020	9/9/2020	10/16/2020	6/2/2020	10/14/2020	9/9/2020	10/14/2020	6/4/2020	10/14/2020	6/3/2020	10/14/2020	6/3/2020	10/15/2020
Appendix III																	
Boron, ug/L	NP	2,950		500	290	2,200	1,200	2,500	3,500	3,900	4,100	4,700	4,500	4,400	4,400	6,700	6,500
Calcium, mg/L	P	210		130	92	150	62	190	140	10	11	34	37	82	59	74	78
Chloride, mg/L	P	209		87	17	18	16	120	61	34	31	58	45	84	64	36	23
Fluoride, mg/L	P	0.427		0.65	<0.23	0.27	J <0.23	0.64	<0.23	<0.23	<0.23	0.37	J <0.23	0.58	<0.23	0.57	<0.23
Field pH, Std. Units	P	8.17		7.30	7.34	7.33	NA	7.10	7.41	7.83	7.8	9.65	9.70	7.09	7.61	7.13	7.37
Sulfate, mg/L	P	457		100	19	100	130	220	110	110	110	190	160	180	160	200	210
Total Dissolved Solids, mg/L	P	1,113		590	390	570	620	950	640	370	360	470	460	730	550	670	560
Appendix IV																	
		UPL	GPS														
Antimony, ug/L	P*	0.17	6	<0.58	1.9	1.1	1.5	<0.58	<0.51	<0.51	<0.51	<0.58	<0.51	<0.58	<0.51	<0.58	<0.51
Arsenic, ug/L**	P	114.9	114.9	55	63	15	5.1	19	15	<0.88	<0.88	76	69	34	33	22	19
Barium, ug/L	P	1,147	2,000	550	400	290	90	300	220	45	47	66	74	260	220	190	200
Beryllium, ug/L	NP*	0.036	4	<0.27	<0.27	2.3	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27
Cadmium, ug/L	NP*	0.025	5	<0.039	<0.049	0.69	0.062	J <0.039	<0.049	0.058	J 0.052	J 0.044	J <0.049	<0.039	<0.049	0.095	J 0.066
Chromium, ug/L	P*	0.090	100	<1.1	<1.1	5.4	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
Cobalt, ug/L	P	3.87	6	2.3	1.5	28	3.4	0.81	0.28	J 0.11	J 0.15	J <0.091	<0.091	0.57	0.33	J 0.67	0.50
Fluoride, mg/L	P	0.427	4	0.65	<0.23	0.27	J <0.23	0.64	<0.23	<0.23	<0.23	0.37	J <0.23	0.58	<0.23	0.57	<0.23
Lead, ug/L	NP*	0.64	15	<0.27	<0.11	20	3.5	1.1	<0.11	0.69	0.63	0.40	J 0.15	J <0.27	<0.11	<0.27	<0.11
Lithium, ug/L	NP*	7.7	40	<2.3	<2.5	32	36	<2.3	<2.5	6.8	J 8.3	J 48	51	2.4	J <2.5	22	27
Mercury, ug/L	DQ	DQ	2	<0.10	<0.10	<0.10	<0.10	0.13	J <0.10	<0.10	<0.10	0.13	J <0.10	<0.10	<0.10	<0.10	<0.10
Molybdenum, ug/L	NP	14.7	100	5.8	3.6	19	33	11	23	110	120	120	110	87	100	320	290
Selenium, ug/L	P*	0.28	50	<1.0	<1.0	1.5	J <0.10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Thallium, ug/L	NP*	0.35	2	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA
Radium 226/228 Combined, pCi/L	P	3.36	5	0.844	0.552	4.91	0.878	0.802	0.297	0.605	0.412	0.268	0.106	0.296	0.372	0.543	0.627
Additional Parameters for Selection of Remedy																	
Lithium, dissolved, # ug/L	UPL or GPS not applicable			NA	NA	NA	NA	NA	NA	NA	NA	NA	53.0	NA	NA	NA	NA
Iron, dissolved, # ug/L	UPL or GPS not applicable			NA	16,000	NA	<50.0	NA	16,000	NA	460	NA	<50.0	NA	11,000	NA	11,000
Iron, ug/L	UPL or GPS not applicable			NA	18,000	NA	1,600	NA	16,000	NA	610	NA	<50.0	NA	12,000	NA	11,000
Magnesium, ug/L	UPL or GPS not applicable			NA	24,000	NA	25,000	NA	30,000	NA	1,700	NA	1,700	NA	18,000	NA	12,000
Manganese, dissolved, # ug/L	UPL or GPS not applicable			NA	4,000	NA	420	NA	4,300	NA	420	NA	290	NA	3,400	NA	8,200
Manganese, ug/L	UPL or GPS not applicable			NA	4,400	NA	470	NA	4,200	NA	430	NA	280	NA	3,200	NA	7,900
Molybdenum, dissolved, # ug/L	UPL or GPS not applicable			NA	NA	NA	NA	NA	NA	NA	120	NA	110	NA	NA	NA	300
Potassium, ug/L	UPL or GPS not applicable			NA	2,700	NA	6,900	NA	2,300	NA	3,100	NA	35,000	NA	1,800	NA	11,000
Sodium, ug/L	UPL or GPS not applicable			NA	13,000	NA	140,000	NA	36,000	NA	110,000	NA	84,000	NA	90,000	NA	73,000
Bicarbonate Alkalinity, mg/L	UPL or GPS not applicable			NA	330	NA	410	NA	380	NA	110	NA	54.0	NA	190	NA	240
Carbonate Alkalinity, mg/L	UPL or GPS not applicable			NA	<3.80	NA	<3.8	NA	<3.80	NA	<1.9	NA	89.0	NA	<3.8	NA	<3.80
Total Alkalinity, mg/L	UPL or GPS not applicable			NA	330	NA	410	NA	380	NA	110	NA	140	NA	190	NA	240

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17

Blue highlighted cell indicates the compliance well result exceeds the UPL (background) and the LOQ.

Yellow highlighted cell indicates the compliance well result exceeds the GPS.

Grayscale indicates Additional Parameters sampled for selection of remedy and evaluation of Monitored Natural Attenuation.

**Table 5. Groundwater Analytical Results Summary
Burlington Generating Station, Burlington, Iowa
SCS Engineers Project #25220066.00**

Parameter Name	UPL Method	UPL	GPS	Background Wells				Delineation Wells								
				MW-310		MW-310A		MW-311		MW-313		MW-313A				
				6/2/2020	10/14/2020	9/9/2020	10/16/2020	6/2/2020	10/14/2020	6/3/2020	10/15/2020	9/9/2020	10/15/2020			
Appendix III																
Boron, ug/L	NP	2,950		500	290	2,200	1,200	2,500	3,500	8,600	7,600	4,300	4,200			
Calcium, mg/L	P	210		130	92	150	62	190	140	120	110	48	44			
Chloride, mg/L	P	209		87	17	18	16	120	61	83	50	210	200			
Fluoride, mg/L	P	0.427		0.65	<0.23	0.27	J	<0.23	0.64	<0.23	0.52	<0.23	<0.23	<0.23		
Field pH, Std. Units	P	8.17		7.30	7.34	7.33	NA	7.10	7.41	7.03	7.16	7.60	7.64			
Sulfate, mg/L	P	457		100	19	100	130	220	110	230	170	200	190			
Total Dissolved Solids, mg/L	P	1,113		590	390	570	620	950	640	830	640	730	660			
Appendix IV																
		UPL	GPS													
Antimony, ug/L	P*	0.17	6	<0.58	1.9	1.1	1.5	<0.58	<0.51	<0.58	<0.51	<0.51	<0.51			
Arsenic, ug/L**	P	114.9	114.9	55	63	15	5.1	19	15	6.9	5.5	<0.88	<0.88			
Barium, ug/L	P	1,147	2,000	550	400	290	90	300	220	680	610	270	270			
Beryllium, ug/L	NP*	0.036	4	<0.27	<0.27	2.3	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27			
Cadmium, ug/L	NP*	0.025	5	<0.039	<0.049	0.69	0.062	J	<0.039	<0.049	0.039	J	<0.049	<0.049		
Chromium, ug/L	P*	0.090	100	<1.1	<1.1	5.4	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1			
Cobalt, ug/L	P	3.87	6	2.3	1.5	28	3.4	0.81	0.28	J	0.23	J	0.19	J	<0.091	<0.091
Fluoride, mg/L	P	0.427	4	0.65	<0.23	0.27	J	<0.23	0.64	<0.23	0.52	<0.23	<0.23	<0.23		
Lead, ug/L	NP*	0.64	15	<0.27	<0.11	20	3.5	1.1	<0.11	<0.27	<0.11	<0.11	<0.11			
Lithium, ug/L	NP*	7.7	40	<2.3	<2.5	32	36	<2.3	<2.5	52	51	13	13			
Mercury, ug/L	DQ	DQ	2	<0.10	<0.10	<0.10	<0.10	0.13	J	<0.10	0.13	J	<0.10	<0.10		
Molybdenum, ug/L	NP	14.7	100	5.8	3.6	19	33	11	23	130	100	120	120			
Selenium, ug/L	P*	0.28	50	<1.0	<1.0	1.5	J	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0			
Thallium, ug/L	NP*	0.35	2	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA	<0.26	NA			
Radium 226/228 Combined, pCi/L	P	3.36	5	0.844	0.552	4.91	0.878	0.802	0.297	1.81	1.26	1.5	0.914			
Additional Parameters for Selection of Remedy																
Lithium, dissolved, # ug/L	UPL or GPS not applicable			NA	NA	NA	NA	NA	NA	NA	53.0	NA	NA			
Iron, dissolved, # ug/L	UPL or GPS not applicable			NA	16,000	NA	<50.0	NA	16,000	NA	14,000	NA	1,700			
Iron, ug/L	UPL or GPS not applicable			NA	18,000	NA	1,600	NA	16,000	NA	15,000	NA	1,600			
Magnesium, ug/L	UPL or GPS not applicable			NA	24,000	NA	25,000	NA	30,000	NA	21,000	NA	4,300			
Manganese, dissolved, # ug/L	UPL or GPS not applicable			NA	4,000	NA	420	NA	4,300	NA	6,300	NA	680			
Manganese, ug/L	UPL or GPS not applicable			NA	4,400	NA	470	NA	4,200	NA	6,100	NA	670			
Molybdenum, dissolved, # ug/L	UPL or GPS not applicable			NA	NA	NA	NA	NA	NA	NA	100	NA	120			
Potassium, ug/L	UPL or GPS not applicable			NA	2,700	NA	6,900	NA	2,300	NA	14,000	NA	12,000			
Sodium, ug/L	UPL or GPS not applicable			NA	13,000	NA	140,000	NA	36,000	NA	58,000	NA	160,000			
Bicarbonate Alkalinity, mg/L	UPL or GPS not applicable			NA	330	NA	410	NA	380	NA	380	NA	88.0			
Carbonate Alkalinity, mg/L	UPL or GPS not applicable			NA	<3.80	NA	<3.8	NA	<3.80	NA	<3.80	NA	<1.9			
Total Alkalinity, mg/L	UPL or GPS not applicable			NA	330	NA	410	NA	380	NA	380	NA	88.0			

4.4
30.8
17

Blue highlighted cell indicates the compliance well result. See page 3 for Notes and Abbreviations
Yellow highlighted cell indicates the compliance well result
Grayscale indicates Additional Parameters sampled for

**Table 1. Groundwater Analytical Results Summary - Assessment Monitoring
Burlington Generating Station, Burlington, IA / SCS Engineers Project #25220066.00**

Abbreviations:

UPL = Upper Prediction Limit
 NA = Not Analyzed
 mg/L = milligrams per liter

GPS = Groundwater Protection Standard
 DQ = Double Quantification Rule (not detected in background)
 NP = Nonparametric UPL (highest background value) with 1-of-2- retesting

LOD = Limit of Detection
 LOQ = Limit of Quantification
 P = Parametric UPL with 1-of-2 retesting

J = Estimated concentration at or above the LOD and below the LOQ.

* = UPL is below the LOQ for background sampling. For compliance wells, only results confirmed above the LOQ are evaluated as potential SSIs above background.

** = UPL for arsenic is greater than the MCL and will be used as the GPS.

= Dissolved parameter samples collected for MNA data review

Notes:

1. An individual result above the UPL or GPS does not constitute a statistically significant increase (SSI) above background or statistically significant level above the GPS. See the accompanying letter text for identification of statistically significant results.
2. GPS is the United States Environmental Protection Agency (US EPA) Maximum Contamination Level (MCL), if established, or the value from 40 CFR 257.95(h)(2), or the background UPL if it is higher.
3. Interwell UPLs calculated based on results from background wells MW-310 and MW-311.

Created by: <u>NDK</u>	Date: <u>5/1/2018</u>
Last revision by: <u>NDK</u>	Date: <u>1/21/2021</u>
Checked by: <u>MDB</u>	Date: <u>1/21/2021</u>
Scientist or Proj Mgr QA/QC: <u>TK</u>	Date: <u>1/22/2021</u>

Table 6. Groundwater Field Data Summary
Burlington Generating Station / SCS Engineers Project #25220066.00

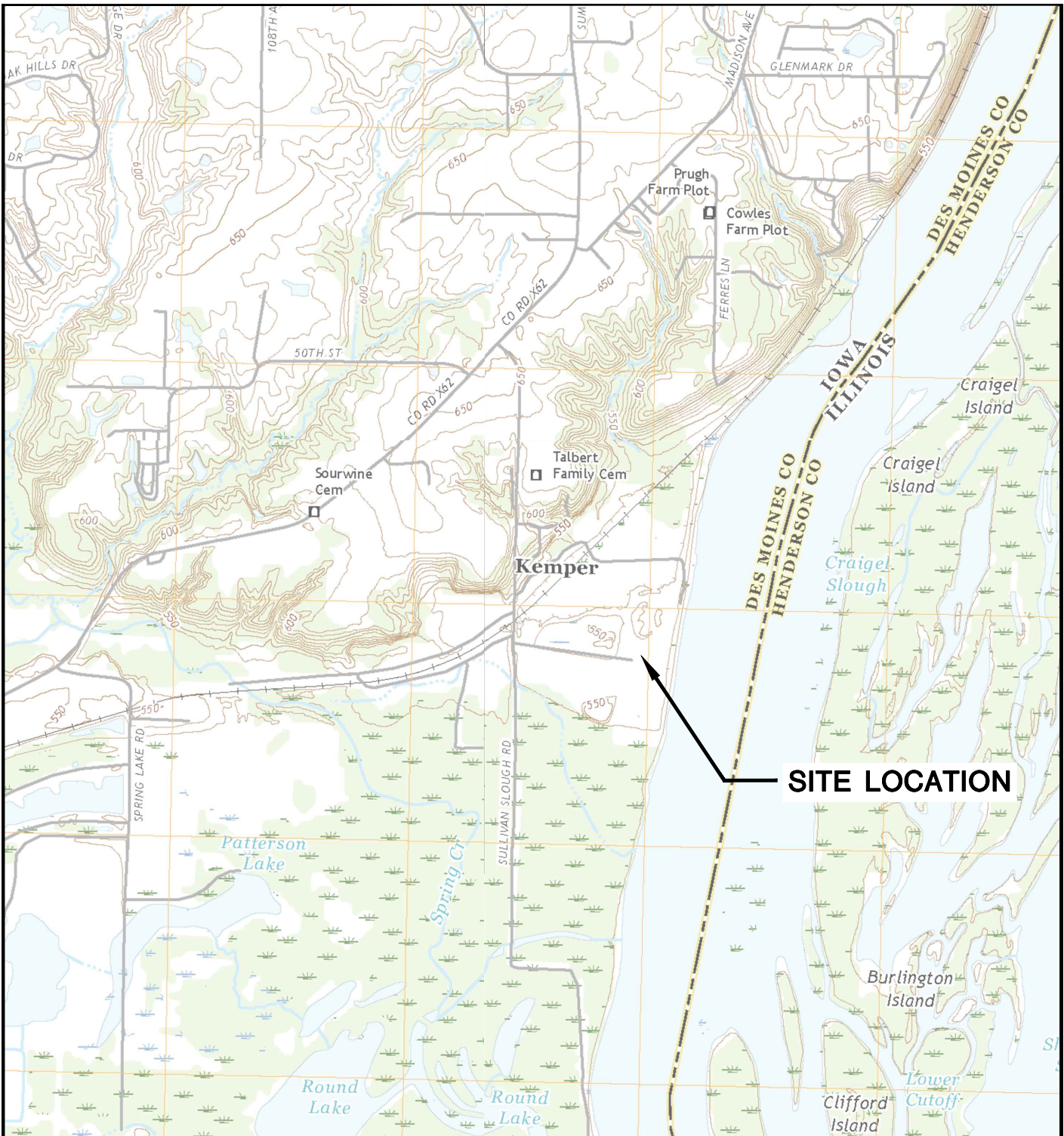
Well	Sample Date	Groundwater Elevation (feet)	Field Temperature (deg C)	Field pH (Std. Units)	Oxygen, Dissolved (mg/L)	Field Specific Conductance (umhos/cm)	Field Oxidation Potential (mV)	Turbidity (NTU)
MW-301	6/3/2020	523.94	13.4	6.99	0.25	1167	37.1	20.2
	10/16/2020	519.26	13.7	7.07	0.09	1503	-187.5	3.4
MW-302	6/3/2020	523.98	12.9	7.88	0.18	1245	36.7	25.3
	10/16/2020	518.94	12.9	7.87	0.08	1168	-237.1	0.07
MW-302A	9/9/2020	519.71	13.3	7.31	0.27	1013	-142.0	0.01
	10/16/2020	518.79	13.1	7.26	0.19	951	-175.3	3.8
MW-303	6/3/2020	523.97	14.8	7.12	0.18	934	58.1	16.0
	10/16/2020	518.78	13.7	7.19	0.12	902	-185.6	2.0
MW-304	6/3/2020	524.02	14.6	7.23	0.15	1087	52.4	18.2
	10/15/2020	518.69	14.7	8.46	0.08	1062	-282.6	0.02
MW-305	6/3/2020	524.12	15.9	7.12	0.14	972	39.8	13.5
	10/15/2020	519.00	14.6	7.23	0.37	987	-175.0	0.02
MW-306	6/4/2020	524.45	14.4	10.48	0.16	482	59.0	16.0
	10/15/2020	519.05	14.1	10.00	0.11	453.7	-273.7	0.02
MW-307	6/4/2020	524.62	14.8	10.03	0.30	586	60.2	14.3
	10/15/2020	519.33	14.0	10.05	0.11	564.8	-269.7	0.02
MW-307A	9/9/2020	519.97	14.4	7.83	0.17	585	-154.2	0.00
	10/14/2020	519.00	14.6	7.80	0.18	553.6	-189.9	3.0
MW-308	6/4/2020	524.10	15.4	9.65	0.23	713	28.0	13.4
	10/14/2020	519.02	14.7	9.70	0.10	682	-264.6	0.2
MW-309	6/3/2020	524.06	14.8	7.09	0.23	1086	37.0	18.9
	10/14/2020	519.28	14.3	7.61	0.14	851	-208.4	18.9
MW-310	6/2/2020	525.36	12.8	7.30	0.13	881	38.6	17.8
	10/14/2020	523.81	16.4	7.34	0.08	711	-223.6	3.8
MW-310A	9/9/2020	509.16	14.2	7.33	--	1026	145.3	714
	10/16/2020	489.84	--	--	--	--	--	--
MW-311	6/2/2020	524.05	12.3	7.10	0.16	1464	-1.1	18.0
	10/14/2020	520.59	14.5	7.41	0.10	1041	-194.0	2.4
MW-312	6/3/2020	524.05	14.7	7.13	0.17	878	53.3	21.2
	10/15/2020	518.68	15.1	7.37	0.13	854	-203.1	0.02
MW-313	6/3/2020	524.02	17.2	7.03	0.29	1099	50.9	50.8
	10/15/2020	518.70	15.3	7.16	0.14	999	-183.3	14.3
MW-313A	9/9/2020	515.36	15.3	7.60	--	1243	-164.4	0.00
	10/15/2020	518.61	14.8	7.64	0.10	1133	-190.1	0.02

Created by: RM
 Last revision by: RM
 Checked by: NDK

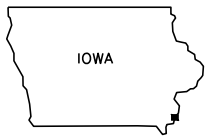
Date: 12/24/2020
 Date: 1/11/2021
 Date: 1/21/2021

Figures

- 1 Site Location Map
- 2 Site Plan and Monitoring Well Locations
- 3 Potentiometric Surface Map – June 2020
- 4 Potentiometric Surface Map – September 2020



LOMAX QUADRANGLE
 ILLINOIS / IOWA-DES MOINES CO.
 7.5 MINUTE SERIES (TOPOGRAPHIC)
 2018
 SCALE: 1" = 2,000'



CLIENT	ALLIANT ENERGY 4902 N. BILTMORE LANE, #1000 MADISON, WI 53718		SITE	ALLIANT ENERGY BURLINGTON GENERATING STATION BURLINGTON, IOWA		ENGINEER	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830		FIGURE 1
	PROJECT NO.	25219066.00		DRAWN BY:	BSS		APPROVED BY:	TK 01/30/2020	
	DRAWN:	11/14/2019	CHECKED BY:	MDB					
	REVISED:	01/14/2020							

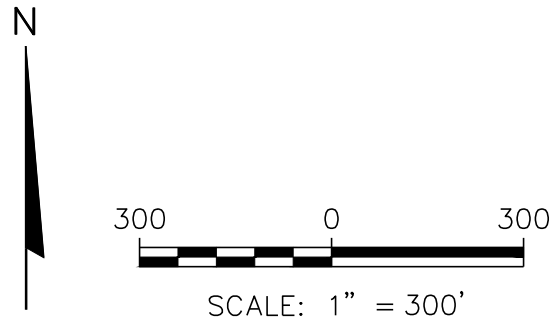
I:\25219066.00\Drawings\CCR 2019 Annual Report\Site Location Map.dwg, 1/30/2020 3:35:22 PM



LEGEND

- EXISTING CCR RULE MONITORING WELL
- EXISTING CCR RULE PIEZOMETER
- CCR RULE BACKGROUND MONITORING WELL
- CCR UNITS

- NOTES:**
1. MONITORING WELLS MW-303 THROUGH MW-308 WERE INSTALLED BY CASCADE DRILLING, LLP. UNDER THE SUPERVISION OF SCS ENGINEERS ON DECEMBER 15-17, 2015.
 2. MONITORING WELLS MW-301, MW-302, AND MW-309 THROUGH MW-311 WERE INSTALLED BY DIRECT PUSH ANALYTICAL SERVICES CORP. UNDER THE SUPERVISION OF SCS ENGINEERS FROM FEBRUARY 29, 2016 TO MARCH 1, 2016.
 3. MONITORING WELLS MW-312 AND MW-313 WERE INSTALLED BY ROBERTS ENVIRONMENTAL DRILLING IN MAY 2019.
 4. 2018 AERIAL PHOTOGRAPH SOURCES: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA FSA, USGS, AEX, GETMAPPING, AEROGRIID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY.
 5. BACKGROUND MONITORING WELLS FOR THE BURLINGTON GENERATING STATION ARE: MW-310 AND MW-311.



PROJECT NO.	25220066.00
DRAWN:	11/14/2019
REVISED:	10/16/20

DRAWN BY:	RJG
CHECKED BY:	MDB
APPROVED BY:	TK

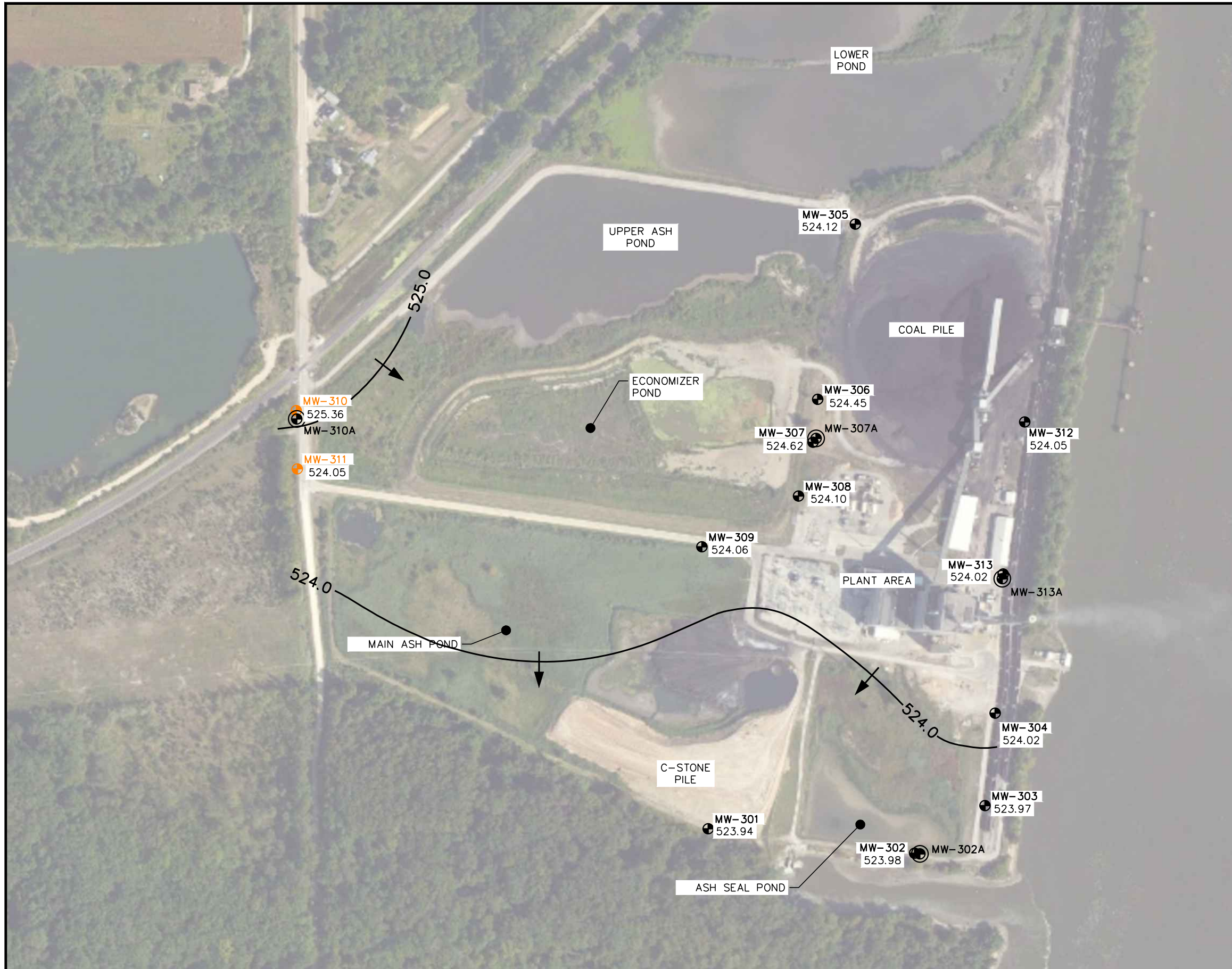
SCS ENGINEERS
 2830 DAIRY DRIVE MADISON, WI 53718-6751
 PHONE: (608) 224-2830

CLIENT	ALLIANT ENERGY 4902 N. BILTMORE LANE, #1000 MADISON, WI 53718
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SITE	ALLIANT ENERGY BURLINGTON GENERATING STATION BURLINGTON, IOWA
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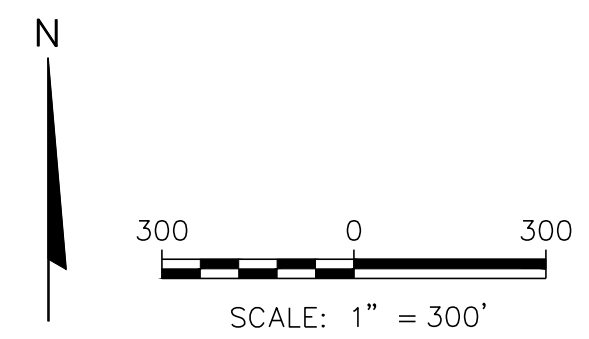
SITE PLAN AND MONITORING WELL LOCATIONS

FIGURE	2
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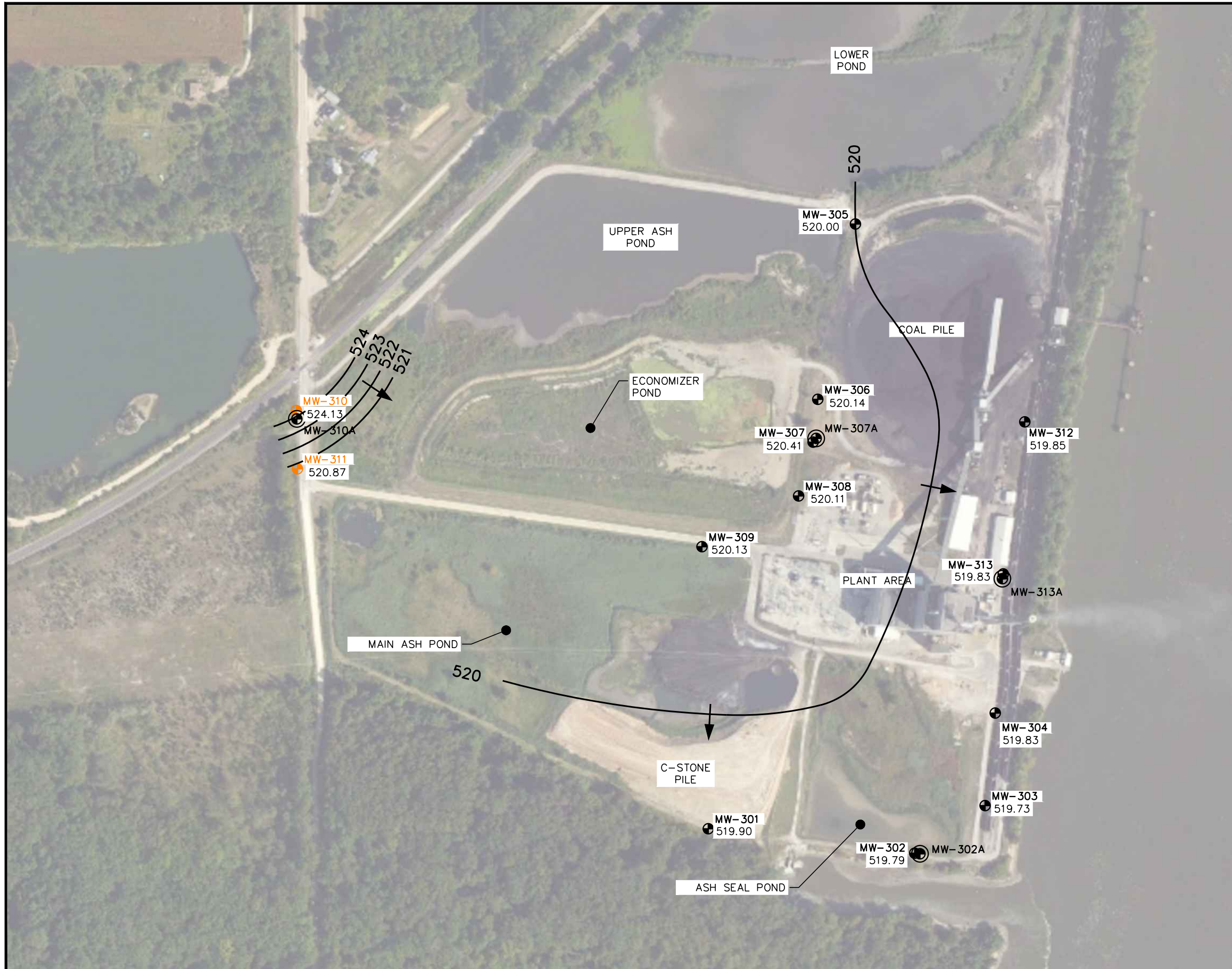


LEGEND	
	MONITORING WELL
	DEEP PIEZOMETER
	CCR BACKGROUND MONITORING WELL
	WATER TABLE ELEVATION CONTOUR (DASHED WHERE INFERRED)
	APPROXIMATE FLOW DIRECTION

- NOTES:
1. MONITORING WELLS MW-303 THROUGH MW-308 WERE INSTALLED BY CASCADE DRILLING, LLP. UNDER THE SUPERVISION OF SCS ENGINEERS ON DECEMBER 15-17, 2015.
 2. MONITORING WELLS MW301, MW302, AND MW309-MW311 WERE INSTALLED BY DIRECT PUSH ANALYTICAL SERVICES CORP. UNDER THE SUPERVISION OF SCS ENGINEERS FROM FEBRUARY 29, 2016 TO MARCH 1, 2016.
 3. MONITORING WELLS MW-301 THROUGH MW-311 WERE SURVEYED BY FRENCH-RENEKER ASSOCIATES OF FRANKLIN, IA ON MARCH 16, 2016.
 4. MONITORING WELLS MW-312 AND MW-313 WERE INSTALLED BY ROBERTS ENVIRONMENTAL DRILLING IN MAY 2019.
 5. DEEP PIEZOMETERS MW-302A, MW-307A, MW-310A, AND MW-313A WERE INSTALLED BY ROBERTS ENVIRONMENTAL DRILLING IN JUNE-JULY 2020.
 6. GROUNDWATER ELEVATION ESTIMATED BASED ON MONITORING WELLS SCREENED BELOW THE POTENTIOMETRIC SURFACE IN THE SAND UNIT.
 7. BACKGROUND MONITORING WELLS FOR THE BURLINGTON GENERATING STATION ARE: MW-310 AND MW-311.



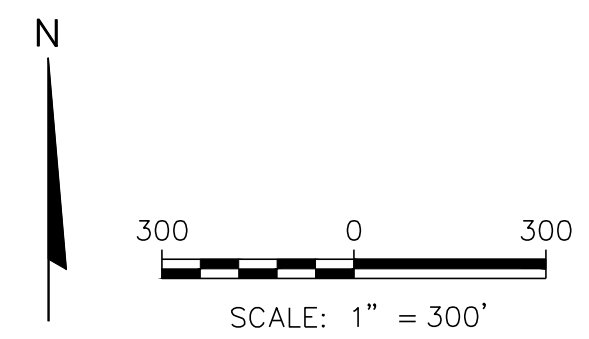
PROJECT NO. 25220066.00	DRAWN BY: BSS/KP/ZTW	 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830	CLIENT	ALLIANT ENERGY 4902 N. BILTMORE LANE, #1000 MADISON, WI 53718	SITE	ALLIANT ENERGY BURLINGTON GENERATING STATION BURLINGTON, IOWA	POTENTIOMETRIC SURFACE MAP JUNE 2-4, 2020	FIGURE 3
DRAWN: 09/18/2020	CHECKED BY: TK		ENGINEER					
REVISED: 01/21/2021	APPROVED BY: TK 01/21/2021							



LEGEND


	MONITORING WELL
	DEEP PIEZOMETER
	CCR BACKGROUND MONITORING WELL
	WATER TABLE ELEVATION CONTOUR (DASHED WHERE INFERRED)
	APPROXIMATE FLOW DIRECTION

- NOTES:
1. MONITORING WELLS MW-303 THROUGH MW-308 WERE INSTALLED BY CASCADE DRILLING, LLP. UNDER THE SUPERVISION OF SCS ENGINEERS ON DECEMBER 15-17, 2015.
 2. MONITORING WELLS MW301, MW302, AND MW309-MW311 WERE INSTALLED BY DIRECT PUSH ANALYTICAL SERVICES CORP. UNDER THE SUPERVISION OF SCS ENGINEERS FROM FEBRUARY 29, 2016 TO MARCH 1, 2016.
 3. MONITORING WELLS MW-301 THROUGH MW-311 WERE SURVEYED BY FRENCH-RENEKER ASSOCIATES OF FRANKLIN, IA ON MARCH 16, 2016.
 4. MONITORING WELLS MW-312 AND MW-313 WERE INSTALLED BY ROBERTS ENVIRONMENTAL DRILLING IN MAY 2019.
 5. DEEP PIEZOMETERS MW-302A, MW-307A, MW-310A, AND MW-313A WERE INSTALLED BY ROBERTS ENVIRONMENTAL DRILLING IN JUNE-JULY 2020.
 6. GROUNDWATER ELEVATION ESTIMATED BASED ON MONITORING WELLS SCREENED BELOW THE POTENTIOMETRIC SURFACE IN THE SAND UNIT.
 7. BACKGROUND MONITORING WELLS FOR THE BURLINGTON GENERATING STATION ARE: MW-310 AND MW-311.



PROJECT NO. 252191680	DRAWN BY: BSS/KP	 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830	CLIENT	ALLIANT ENERGY 4902 N. BILTMORE LANE, #1000 MADISON, WI 53718	SITE	ALLIANT ENERGY BURLINGTON GENERATING STATION BURLINGTON, IOWA	LOW POTENTIOMETRIC SURFACE MAP SEPTEMBER 9, 2020	FIGURE		
DRAWN: 09/18/2020	CHECKED BY: MDB									4
REVISED: 09/24/2020	APPROVED BY: TK 10/21/20									

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Appendix A
Summary of Regional Hydrogeologic Information

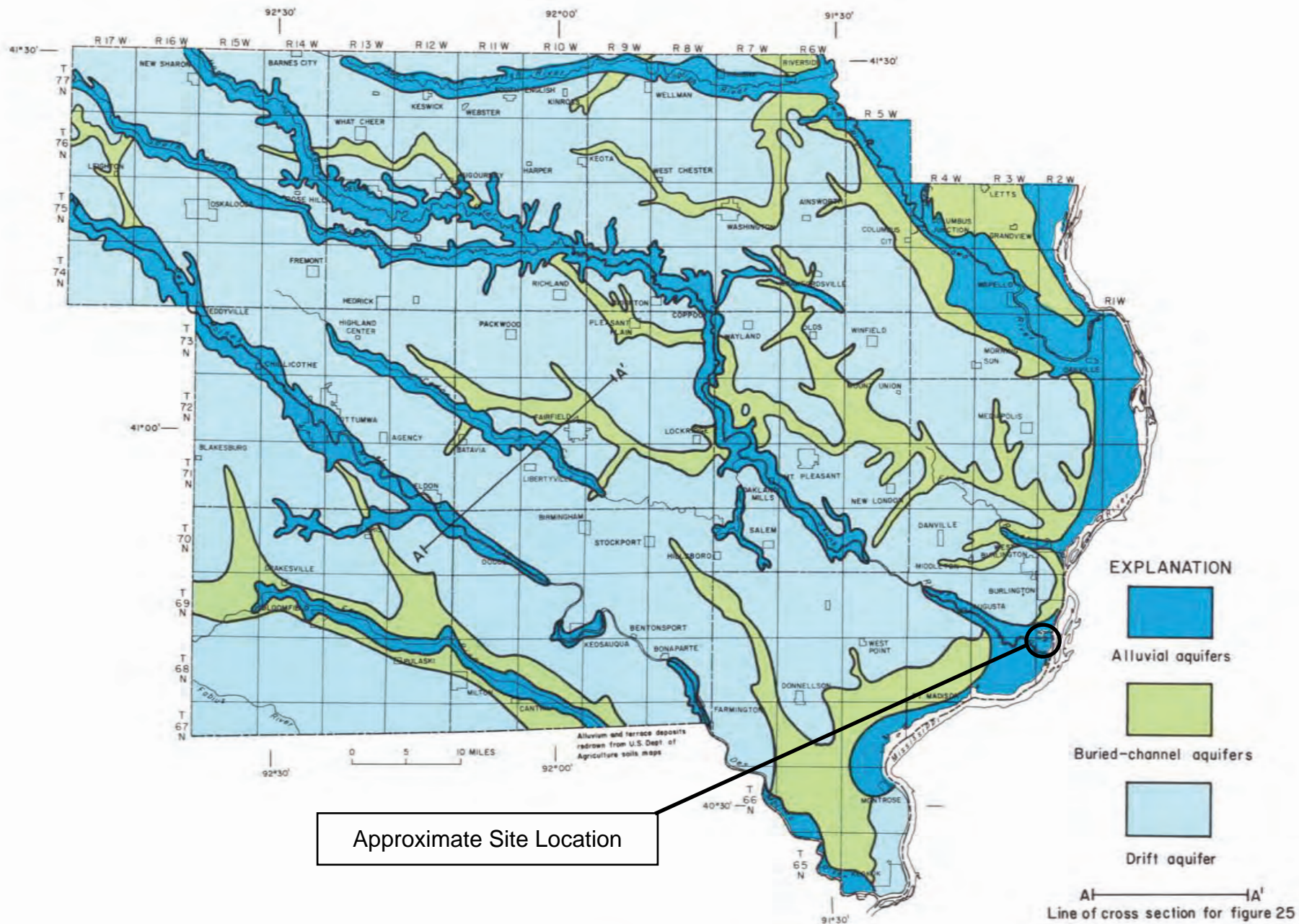
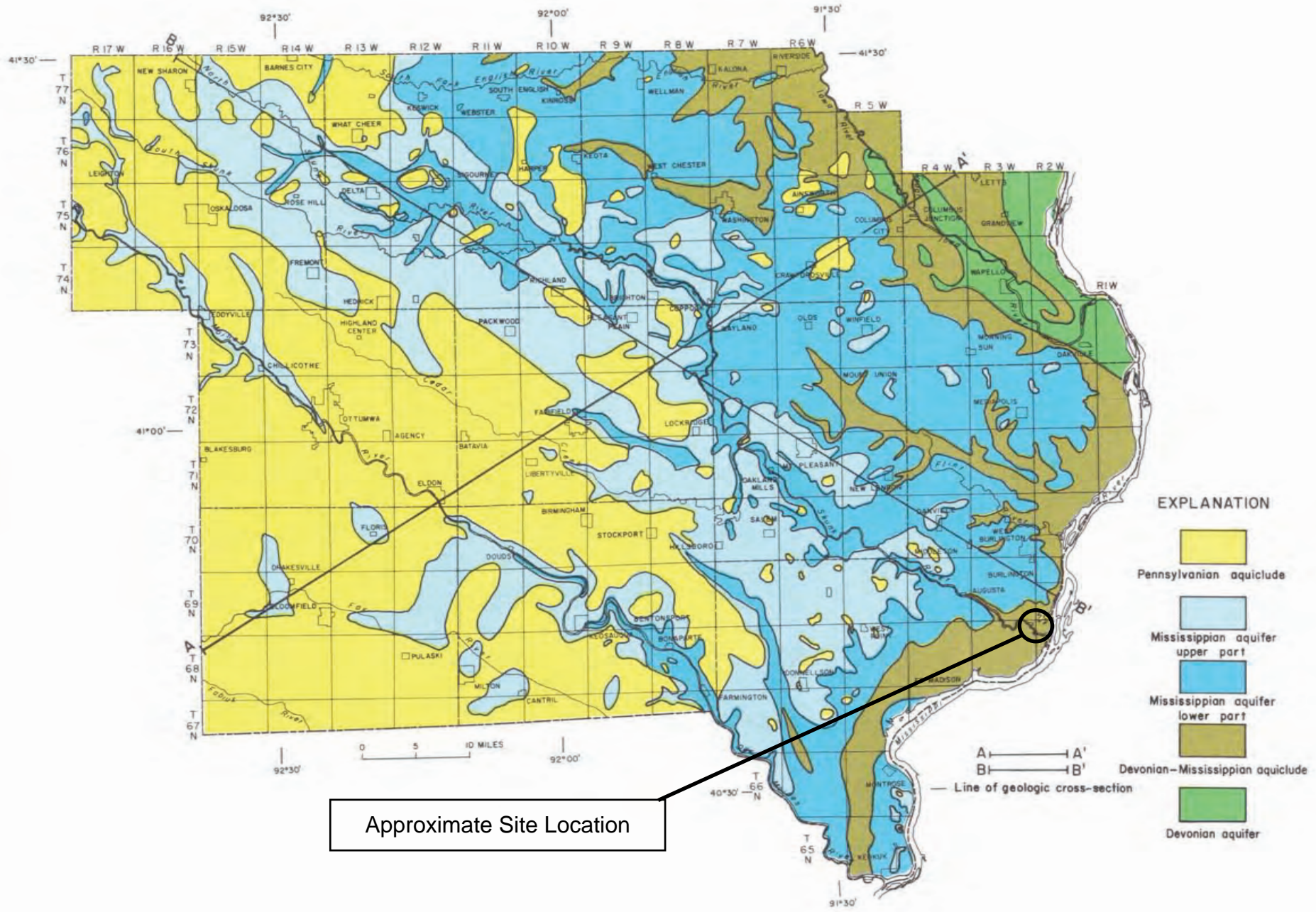


Figure 24.—Areal distribution of surficial aquifers

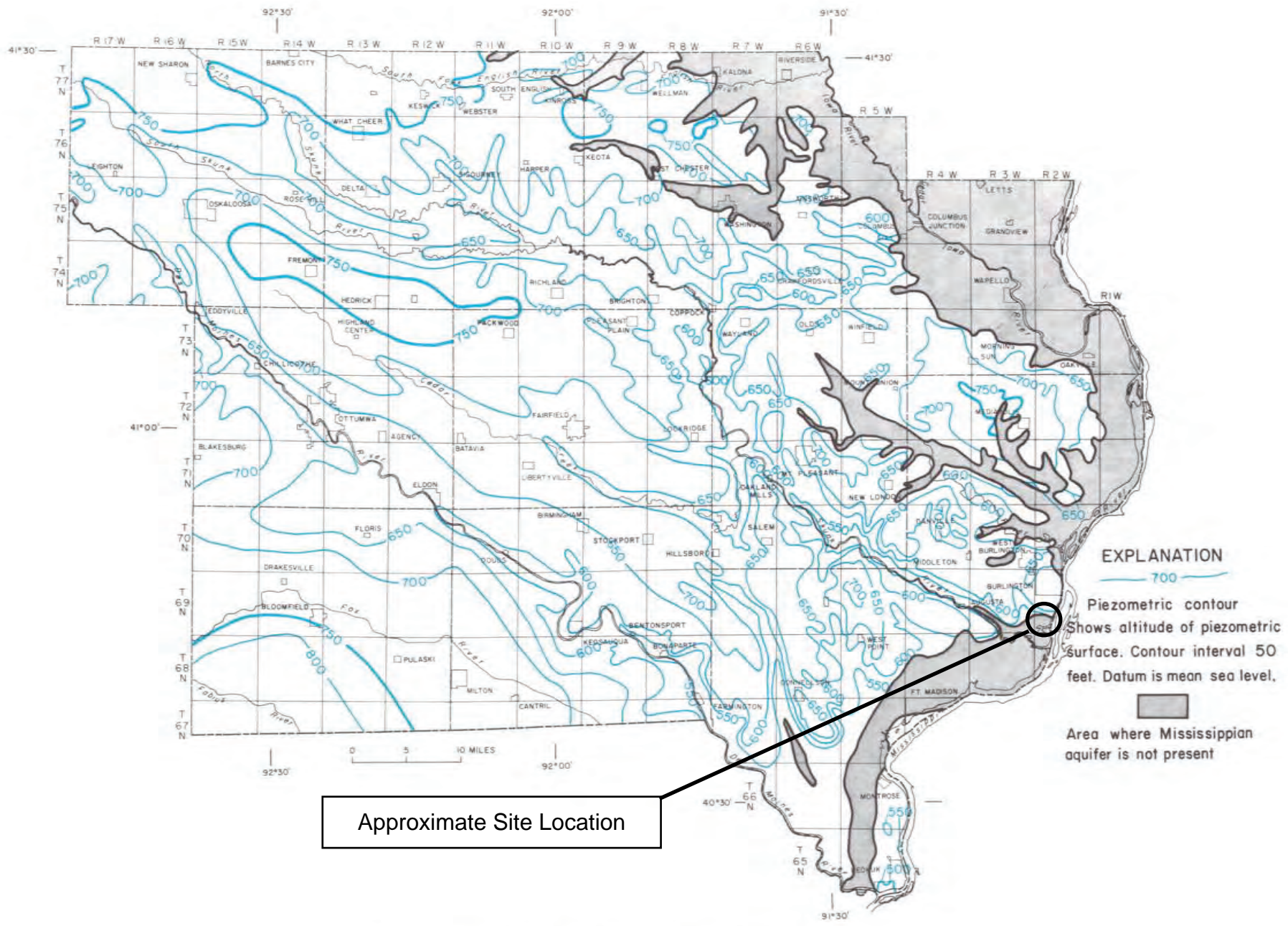
Source: Coble, R.W., The Water Resources of Southeast Iowa, Iowa Geological Survey Water Atlas Number 4, 1971.



Approximate Site Location

Figure 27.—Bedrock hydrogeologic map

Source: Coble, R.W., The Water Resources of Southeast Iowa, Iowa Geological Survey Water Atlas Number 4, 1971.



Approximate Site Location

Figure 41.—Altitude of the water levels in wells tapping the Mississippiian aquifer

Source: Coble, R.W., The Water Resources of Southeast Iowa, Iowa Geological Survey Water Atlas Number 4, 1971.

Appendix B

Boring logs and Well Construction Documentation

Route To: Watershed/Wastewater Waste Management
 Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-301	
Boring Drilled By: Name of crew chief (first, last) and Firm Kevin Collins Direct Push Analytical			Date Drilling Started 2/29/2016	Date Drilling Completed 2/29/2016	Drilling Method Direct Push 4-1/2/HSA
Unique Well No.	DNR Well ID No.	Common Well Name MW-301	Final Static Water Level Feet	Surface Elevation 536.0 Feet	Borehole Diameter 8.5 in
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 278,382 N, 2,300,041 E S/C/N SW 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W			Lat _____ " _____ "		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID		County Des Moines	Civil Town/City/ or Village Burlington		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200			
			1	FILL, boring location was cleared to 10' bgs by hydrovac, then back filled.	FILL											
			2													
			3													
			4													
			5													
			6													
			7													
			8													
			9													
			10													LEAN CLAY WITH SAND, very dark gray (10YR 3/1).
S1	16		11													
S2	45		14													
			15													

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-301

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S3	37		16	LEAN CLAY WITH SAND, very dark gray (10YR 3/1). <i>(continued)</i>	CL									
			17											
			18	POORLY GRADED SAND, very dark gray (10YR 3/1).	SP					W				
S4	24		19											
			20	SILT WITH SAND, very dark gray (10YR 3/1).	ML									
			21	POORLY GRADED SAND, very dark gray (10YR 3/1).	SP									
			22	SANDY SILT, very dark gray (10YR 3/1).	MLS					W				
S5	NA		23											
			24	POORLY GRADED SAND, very dark gray (10YR 3/1).										
			25											
			26											
			27		SP									
			28											
			29											
				End of Boring at 29.50 feet bgs.										

Recovery
NA sleeve
stuck in
discrete
sampler.

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other


Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-302	
Boring Drilled By: Name of crew chief (first, last) and Firm Kevin Collins Direct Push Analytical		Date Drilling Started 2/29/2016		Date Drilling Completed 2/29/2016	
Unique Well No.		DNR Well ID No.		Common Well Name MW-302	
Final Static Water Level Feet		Surface Elevation 533.2 Feet		Borehole Diameter 8.5 in	

Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		Local Grid Location	
State Plane 278,310 N, 2,300,647 E S/C/N		Lat _____ " _____ "	
SE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Long _____ " _____ "	
		Feet <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S <input type="checkbox"/> W	

Facility ID	County Des Moines	Civil Town/City/ or Village Burlington
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Sample		Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
Number and Type	Length Att. & Recovered (in)							Blow Counts	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
		1	FILL, boring location was cleared to 10' bgs by hydrovac, then back filled.											
		2												
		3												
		4												
		5		FILL										
		6												
		7												
		8												
		9												
		10												
S1	15	11	POORLY GRADED SAND WITH SILT, medium grained, very dark gray (10YR 3/1).	SP-SM								W		
		12												
		13	POORLY GRADED SAND, medium grained, very dark gray (10YR 3/1).	SP								W		
		14												
		15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
--	---	---------------------------

Boring Number MW-302

Page 2 of 2


Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S3	17		16	POORLY GRADED SAND, medium grained, very dark gray (10YR 3/1). (continued)	SP									
			17	LEAN CLAY, very dark gray (10YR 3/1).										
S4	15		18		CL					W				
			19											
S5	16		20	POORLY GRADED SAND, coarse grained, very dark gray (10YR 3/1).										
			21											
			22							W				
			23											
			24		SP									
			25											
			26							W				
			27											
			28	End of Boring at 28 feet bgs.										

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name Burlington Generating Station SCS#: 25220055.00		License/Permit/Monitoring Number		Boring Number MW-302A	
Boring Drilled By: Name of crew chief (first, last) and Firm Jeff Crank Roberts Environmental Services		Date Drilling Started 6/30/2020		Date Drilling Completed 7/1/2020	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level 11.92 Feet		Surface Elevation 533.51 Feet MSL		Borehole Diameter 8.0 in.	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 278,310 N, 2,300,647 E S/C/N SE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Lat _____ ' _____ '' Long _____ ' _____ ''		Local Grid Location Feet <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID		County Des Moines		County Code	
				Civil Town/City/ or Village Burlington	

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
	0		0	Blind drilled to 28' bgs										
			1											
			2	See boring logs for MW-302 for log information from 0-25'bgs.										
			3											
			4											
			5											
			6											
			7											
			8											
			9											
			10											
			11											
			12											
			13											
			14											
			15											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

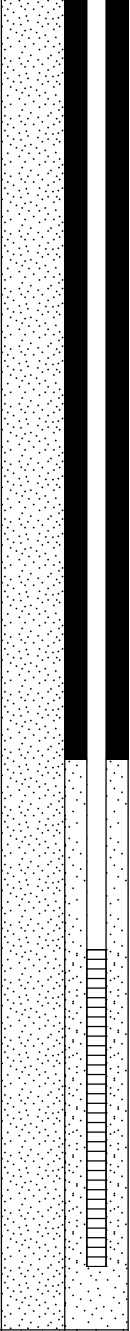
Signature 	Firm SCS Engineers	Tel: Fax:
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This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Boring Number **MW-302A** Use only as an attachment to Form 4400-122. Page **2** of **3**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			16 17 18 19 20 21 22 23 24											
S1	14	34 78	25 26 27	POORLY GRADED SAND, mostly fine to meium grain, trace coarse grain, gray to dark gray (5y, 4/1), with clay lense at top of spoon. olive gray, dense.										
S2	3	02 45	30 31	Same, fine grain, trace coarse grain with large piece of limestone.	SP									Roberts began using water to keep sand from backing up into augers. Took two jar samples from 25-27' bgs.
S3	0	68 78	35 36 37 38 39 40	No returns										

Boring Number **MW-302A** Use only as an attachment to Form 4400-122. Page **3** of **3**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
S4	6	5 7 8 13	41	POORLY GRADED SAND, fine to coarse grain, with gravel, gray to dark gray (5y, 3/1), with very trace silt (same color).											
			42												
			43												
			44												
			45												
S5	0	4 12 16 14	46	No returns											Roberts changed spoon catch.
			47												
			48												
			49												
S6	15	3 8 12 14	50	POORLY GRADED SAND, fine to coarse grain, trace gravel, gray to darkish gray brown, 5y, 4/1).	SP										
			51												
			52												
			53												
			54												
			55												
S7	14	3 6 12 18	56	Same											
			57												
			58												
			59												
			60												
S8	24	6 9 13 25	61	Same											
				End of Boring at 61' below ground surface.											
				Well placed at 60' bgs.										Sampled to 62' bgs and augered to 61' bgs.	

SCS ENGINEERS

Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater Waste Management
 Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-303	
Boring Drilled By: Name of crew chief (first, last) and Firm Mike Mueller Cascade Drilling		Date Drilling Started 12/15/2015		Date Drilling Completed 12/15/2015	
Unique Well No.		DNR Well ID No.		Common Well Name MW-303	
Final Static Water Level Feet		Surface Elevation 531.0 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane 278,450 N, 2,300,854 E S/C/N		Local Grid Location	
SE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Lat _____"		<input type="checkbox"/> N <input type="checkbox"/> E	
		Long _____"		Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W	
Facility ID		County Des Moines		Civil Town/City/ or Village Burlington	

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1-9	FILL, boring location was cleared to 10' bgs by hydrovac, then back filled	FILL									
S1	0	46 88	10-11	LEAN CLAY, dark gray (10YR 3/1).	CL								Rock in the end of shoe.	
S2	14	24 45	13-14							W				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-303

Page 2 of 2


Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
				LEAN CLAY, dark gray (10YR 3/1). (continued)										
S3	15	22 46	16 17											
					CL									
S4	3	12 38	18 19											
														Rock in the end of shoe.
S5	10	48 99	20 21 22	POORLY GRADED SAND, coarse grained, very dark gray (2.5Y 3/1), some gravel.	SP									
S6	14	12 89	23 24 25	POORLY GRADED SAND, very dark gray (2.5Y 3/1), medium grained.	SP									
S7	8	46 810	26 27	same as above except, coarse grained.										
				End of Boring at 27.50 ft bgs.										

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-304	
Boring Drilled By: Name of crew chief (first, last) and Firm Mike Mueller Cascade Drilling		Date Drilling Started 12/15/2015		Date Drilling Completed 12/15/2015	
Drilling Method 4-1/2 hollow stem auger		Unique Well No. MW-304		DNR Well ID No.	
Final Static Water Level Feet		Surface Elevation 532.2 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 278,721 N, 2,300,883 E S/C/N		Lat _____ ' _____ "		Local Grid Location	
SE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Long _____ ' _____ "		Feet <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID		County Des Moines		Civil Town/City/ or Village Burlington	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	FILL, boring location was cleared to 10' bgs by hydrovac, then back filled.											
			2												
			3												
			4												
			5		FILL										
			6												
			7												
			8												
			9												
			10												
			11	FAT CLAY, dark gray (10YR 3/1)											
S1	12	34 11 14	11												
			12												
			13												
S2		23 5 5	13		CH										
			14												
			15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number **MW-304**







Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S3	14	1 1 2 4	16 17	SANDY SILT, very dark gray (2.5Y 3/1), fine grained.	ML				W					
S4	14	1 2 3	18 19	POORLY GRADED SAND, very dark gray (2.5Y 3/1), medium grained,					W					
S5	24	2 3 5 8	21 22		SP				W					
S6	12	3 5 6 7	23 24	Same as above except, coarse grained.					W					
S7	12	3 6 11 16	25 26						W					
			27	End of boring at 27 feet bgs										


Route To: Watershed/Wastewater Waste Management
 Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-305	
Boring Drilled By: Name of crew chief (first, last) and Firm Mike Mueller Cascade Drilling		Date Drilling Started 12/17/2015		Date Drilling Completed 12/17/2015	
Unique Well No.		DNR Well ID No.		Common Well Name MW-305	
Final Static Water Level Feet		Surface Elevation 530.9 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 280,157 N, 2,300,473 E S/C/N		Lat _____ Long _____		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
NE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W					

Facility ID	County Des Moines	Civil Town/City/ or Village Burlington
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Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1	FILL, boring location was cleared to 5' bgs by hydrovac, then back filled.	FILL									
S1	14	13 30 20 12	6	SILT, ash, black (2.5Y 2.5/1), (fill).	ML					M				
S2	6	3 4 2 1	9							M				
S3	5	4 4 6 7	11	LEAN CLAY, olive (5Y 4/4).	CL					M				
S4	10	2 4 6 8	14	same as above except, black (2.5Y 2.5/1).						M				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-305

Page 2 of 2


Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S5	14	11 23	16 17	LEAN CLAY, olive (5Y 4/4). (continued)										
S6	16	11 22	18 19	same as above except, very dark gray (10YR 3/1)	CL									
S7	12	12 45	20 21	POORLY GRADED SAND, very dark gray (10YR 3/1), coarse grained.						W				
S8	12	11 23	22 23 24		SP					W				
S9	8		25 26							W				
				End of Boring at 27.50 ft bgs										

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-306	
Boring Drilled By: Name of crew chief (first, last) and Firm Mike Mueller Cascade Drilling			Date Drilling Started 12/16/2015	Date Drilling Completed 12/17/2015	Drilling Method 4-1/2 hollow stem auger
Unique Well No.	DNR Well ID No.	Common Well Name MW-306	Final Static Water Level Feet	Surface Elevation 534.5 Feet	Borehole Diameter 8.5 in
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 279,643 N, 2,300,362 E S/C/N NE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W			Lat _____ " _____ "		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID		County Des Moines	Civil Town/City/ or Village Burlington		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	FILL, boring location was cleared to 7.5' bgs by hydrovac, then back filled.											
			2												
			3												
			4		FILL										
			5												
			6												
			7												
			8	SANDY SILT, very dark gray (2 5Y 3/1), fine grained sand.											
S1	22	68 12 12	9												
			10												
S2	22	72 22	11		ML							W			
			12												
			13												
S3	12	49 19 21	14									W			
			15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number **MW-306**

Page 2 of 2

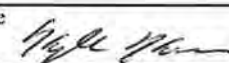
Sample	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
										Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
				16	LEAN CLAY, black (2.5Y 2.5/1).											
S4	10	22	22	16-17								W				
S5	10	11	12	17-19		CL						W				
S6	22	34	5	21-22	SANDY SILT, very dark gray (2.5 3/1), fined grained sand.	ML						W				
				23	LEAN CLAY, black (2.5Y 2.5/1).											
S7	10	11	12	23-24		CL						W				
				25	POORLY GRADED SAND, very dark gray (2.5Y 3/1), coarse grained.											
S8	20	23	610	25-26								W				
S9	10	13	35	27-29								W				
				30		SP										
S10	10	22	38	30-31								W				
				32												
				33												
				34	End of boring at 34 ft bgs.											

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-307	
Boring Drilled By: Name of crew chief (first, last) and Firm Mike Mueller Cascade Drilling		Date Drilling Started 12/16/2015		Date Drilling Completed 12/16/2015	
Unique Well No.		DNR Well ID No.		Common Well Name MW-307	
Final Static Water Level Feet		Surface Elevation 534.3 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane 279,517 N, 2,300,349 E S/C/N		Local Grid Location	
NE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Lat _____"		<input type="checkbox"/> N <input type="checkbox"/> E	
		Long _____"		Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W	
Facility ID		County Des Moines		Civil Town/City/ or Village Burlington	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	FILL, boring location was cleared to 7.5' bgs by hydrovac, then back filled.											
			2												
			3												
			4		FILL										
			5												
			6												
			7												
S1	0		8	SILT, ash, (fill).	ML										
			9												
S2	16	13 8 6 11	10	SANDY SILT, very dark gray (2 5Y 3/1), sand is fine grained											
			11												
			12												
			13		ML										
S3	15	4 9 6 3	14												
			15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-307

Page 2 of 2


Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S4	18	13	16	SANDY SILT, very dark gray (2.5Y 3/1), sand is fine grained. <i>(continued)</i>	ML									
		55	17											
S5	20	12	18	LEAN CLAY, black (10YR 2/1).	CL									
		22	19											
S6	16	12	20	POORLY GRADED SAND, very dark gray (2.5Y 3/1), coarse grained.										
		46	21											
S7	10	12	23		SP									
		44	24											
S8	12	22	25											
		34	26											
			27	End of boring at 27 ft bgs.										

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name Burlington Generating Station SCS#: 25220055.00		License/Permit/Monitoring Number		Boring Number MW-307A	
Boring Drilled By: Name of crew chief (first, last) and Firm Jeff Crank Roberts Environmental Services		Date Drilling Started 6/24/2020		Date Drilling Completed 7/1/2020	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level 12.09 Feet		Surface Elevation 533.94 Feet MSL		Borehole Diameter 8.0 in.	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 279,517 N, 2,300,349 E S/C/N		Lat _____ ' _____ "		Local Grid Location	
NE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Long _____ ' _____ "		Feet <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID		County Des Moines		County Code	
				Civil Town/City/ or Village Burlington	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
	0		0	Blind drilled to 20' bgs											
			1	See boring logs for MW-307 for log information from 0-20'bgs.											
			2												
			3												
			4												
			5												
			6												
			7												
			8												
			9												
			10												
			11												
			12												
			13												
			14												
			15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers	Tel: Fax:
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This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Boring Number **MW-307A** Use only as an attachment to Form 4400-122. Page **2** of **3**



Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S1	19	31 09	16	SILT, dark gray (2.5y, 2.5/1), with trace sand, fine grain to coarse.	ML									
			17											
			18											
			19											
S2	14	57 911	20	POORLY GRADED SAND, fine to medium grain, trace coarse grain, dark gray (2.5y, 2.5/1).										
			21											
			22											
			23											
S3	8	36 77	24	Same, trace silt.										
			25											
			26											
			27											
S4	8	35 78	28	Same, fine to medium grain, grayish brown (2.5y, 3/1), trace pieces of gravel, no silt.										
			29											
			30											
			31											

Boring Number **MW-307A** Use only as an attachment to Form 4400-122. Page **3** of **3**


Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
S5	22	23 66	41	POORLY GRADED SAND, fine to medium grain, gray (2.5y, 4/1), trace gravel with 6" layer of sticks in middle of spoon.											Large amount of sticks in center of spoon.
S6	20	46 1112	46	Same, fine to coarse grain, trace gravel, gray to grayish brown (2.5y, 4/1) with trace sticks.											
S7	0.5	426 16	51	Same, no sticks.	SP										Refusal last 6 inches, sand pushed up into augers and locked up spoon.
S8	20	49 1419	56	Same, fine to medium grain, gray to grayish brown (2.5y, 4/1).											Took two jar samples from 55-57' bgs.
				End of boring at 60' below ground surface. Set well from 59' bgs.											

Route To: Watershed/Wastewater Waste Management
Remediation/Rcdevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-308	
Boring Drilled By: Name of crew chief (first, last) and Firm Mike Mueller Cascade Drilling			Date Drilling Started 12/15/2015	Date Drilling Completed 12/16/2015	Drilling Method 4-1/2 hollow stem auger
Unique Well No.	DNR Well ID No.	Common Well Name MW-308	Final Static Water Level Feet	Surface Elevation 534.9 Feet	Borehole Diameter 8.5 in
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 279,359 N, 2,300,306 E S/C/N			Lat _____ " _____ "		Local Grid Location
NE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W			Long _____ " _____ "		Feet <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S <input type="checkbox"/> W
Facility ID		County Des Moines	Civil Town/City/ or Village Burlington		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties						RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	FILL, boring location was cleared to 5' bgs by hydrovac, then back filled.	FILL										
S1	14	22 12 13 15	5-6	SANDY SILT, olive brown (2.5Y 4/3).											
S2	18	2 2 4 8	8-9												
S3	18	1 2 2 50	11-12		MLS										
S4	14	3 15 50	13-14												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-308

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Aft. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S5	12	6 4	16	LEAN CLAY, black (2.5Y 2.5/1).	CL									
		2 4	17											
S6	12	5 6	18											
		5 10	19											
S7	18	1 1	20	SILT, very dark gray (7.5YR 3/1), trace sand.	ML									
		1 2	21											
S8	10	1 12	22	POORLY GRADED SAND, very dark gray (2.5Y 3/1), coarse grained.										
		13 18	23											
S9	12	2 6	24		SP									
		8 10	25											
S10		2 2	26											
		6 8	27											
			28											
			29											
				End of Boring at 29.5 ft bgs.										

SCS ENGINEERS

Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater Waste Management
 Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-309	
Boring Drilled By: Name of crew chief (first, last) and Firm Kevin Collins Direct Push Analytical		Date Drilling Started 3/1/2016		Date Drilling Completed 3/1/2016	
Unique Well No.		DNR Well ID No.		Common Well Name MW-309	
Final Static Water Level Feet		Surface Elevation 534.1 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane 279,210 N, 2,300,022 E S/C/N		Local Grid Location	
SW 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Lat _____ "		<input type="checkbox"/> N <input type="checkbox"/> E	
		Long _____ "		Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W	
Facility ID		County Des Moines		Civil Town/City/ or Village Burlington	

Sample		Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)							Blow Counts	Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	
		1-10	FILL, boring location was cleared to 10' bgs by hydrovac, then back filled	FILL	[Hatched Pattern]	[Well Diagram]							
S1	14	10-11	LEAN CLAY, olive brown (2.5Y 4/3).	CL						W			
S2	34	11-14	Same as above except, gray (2.5Y 6/1)	CL						W			

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature <i>[Signature]</i>	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-309

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S3	34		16	LEAN CLAY, olive brown (2.5Y 4/3) (continued)	CL									
			17	Same as above except, very dark gray (2.5Y 3/1).										
S4	31		18	POORLY GRADED SAND, coarse grained, very dark gray (10YR 3/1).	SP									
			19											
			20											
			21											
			22											
			23											
			24											
			25	End of Boring at 25 feet bgs.										

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-310	
Boring Drilled By: Name of crew chief (first, last) and Firm Kevin Collins Direct Push Analytical		Date Drilling Started 3/1/2016		Date Drilling Completed 3/1/2016	
Unique Well No.		DNR Well ID No.		Common Well Name MW-310	
Final Static Water Level Feet		Surface Elevation 532.2 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane 279,610 N, 2,298,832 E S/C/N		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
NE 1/4 of SE 1/4 of Section 30, T 69 N, R 2 W		Lat _____ Long _____		Feet _____	

Facility ID	County Des Moines	Civil Town/City/ or Village Burlington
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Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
S1	13		1	LEAN CLAY WITH SAND, dark olive brown (2.5Y 3/3).											
			2												M
			3												
S2	33		4	Same as above except, very dark gray (2.5Y 3/1).	CL										
			5												M
			6												
S3	22		7	Trace organics.											
			8												M
			9												
S4	31		10	SILTY SAND, very dark grayish brown (2.5Y 3/2).	SM										
			11												
			12												
			13	POORLY GRADED SAND, coarse grained, very dark grayish brown (2.5Y 3/2).	SP										
			14												W
			15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-310

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S5	35		16	POORLY GRADED SAND, coarse grained, very dark grayish brown (2.5Y 3/2). (continued)	SP									
			17											
S6	NA		18	LEAN CLAY, dark gray (2.5Y 4/1).	CL									
			19											
			20											
			21											
S6	NA		22	POORLY GRADED SAND, very dark grayish brown (2.5Y 3/2).	SP									
			23											
			24											
			24	End of Boring at 24 feet bgs.										

Sample stuck in discrete sampler. Refusal @24'.

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name Burlington Generating Station SCS#: 25220055.00		License/Permit/Monitoring Number		Boring Number MW-310A	
Boring Drilled By: Name of crew chief (first, last) and Firm Jeff Crank Roberts Environmental Services			Date Drilling Started 6/25/2020	Date Drilling Completed 6/26/2020	Drilling Method 4.25" HSA
WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level 9.15 Feet	Surface Elevation 532.91 Feet MSL	Borehole Diameter 8.0 in.
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 279,610 N, 2,298,832 E S/C/N NE 1/4 of SE 1/4 of Section 30, T 69 N, R 2 W			Lat _____ " _____ "	Local Grid Location Feet <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID	County Des Moines	County Code	Civil Town/City/ or Village Burlington		


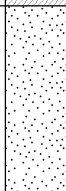



Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Blind drilled to 20' below ground surface. See logs for MW-310 for log information between 0-20' bgs.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.


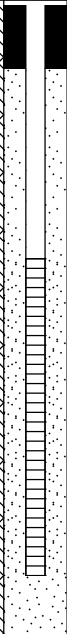

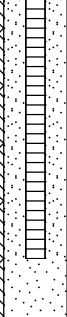
Signature 	Firm SCS Engineers	Tel: Fax:
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Boring Number **MW-310A** Use only as an attachment to Form 4400-122. Page **2** of **3**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			16												
			17												
			18												
			19												
			20												
S1	00 00		21	LEAN CLAY, gray (5Y 3/2), dense with trace sand and gravel.	CL										Took three jar samples from 20-24' bgs.
S2	47 119		22												
			23	POORLY GRADED SAND, fine to medium grained, grayish brown.	SP										
			24												
			25												
S3			26	MUDSTONE (bedrock), 0.25" size pieces and smaller of rock (silt grain size, when broken up), light gray to gray, slightly reactive with acid, with poorly graded sand (overburden), coarse grained, grayish brown.											Bedrock at 25' bgs. Switched to air rotary at 25' bgs.
			27												
			28												
			29												
			30												
S4			31	MUDSTONE, gray (bedrock). (Feels like clay once broken up) with much less sand.											
			32												
			33												
			34												
			35												
S5			36	Same, trace sand, sampled intermittently between 35-40' bgs.											
			37												
			38												
			39												
			40												

Boring Number **MW-310A** Use only as an attachment to Form 4400-122. Page **3** of **3**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S6			41	MUDSTONE, mostly mudstone with some poorly graded sand.										
			42											
S7			43	Same, mostly mudstone with more sand and pieces of lean clay, dark gray (most likely overburden).										
			44											
S8			45	End of Boring at 50' below ground surface.										
			46											
S8			47	Set well at 49' bgs.									Took two jar samples from 47' bgs.	
			48											
S8			49											
			50											

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name IPL- Burlington Generating Station SCS#: 25215135.80		License/Permit/Monitoring Number		Boring Number MW-311	
Boring Drilled By: Name of crew chief (first, last) and Firm Kevin Collins Direct Push Analytical			Date Drilling Started 3/1/2016	Date Drilling Completed 3/1/2016	Drilling Method Direct Push 4-1/2/HSA
Unique Well No.	DNR Well ID No.	Common Well Name MW-311	Final Static Water Level Feet	Surface Elevation 532.7 Feet	Borehole Diameter 8.5 in
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 279,439 N, 2,298,835 E S/C/N			Lat ° ' "		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W
NE 1/4 of SE 1/4 of Section 30 , T 69 N, R 2 W		Long ° ' "		Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W	
Facility ID		County Des Moines	Civil Town/City/ or Village Burlington		

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S1	14		1	TOPSOIL.	TOPSOIL									
			2	LEAN CLAY, dark olive brown (2.5Y 3/3).	CL					M				
S2	8		4	POORLY GRADED SAND, yellowish brown (10YR 5/8), coarse grained.										
			6		SP				M					
S3	6		8	LEAN CLAY, very dark gray (2.5Y 3/1).										
			10		CL				M			Rock in shoe.		
S4	25		14											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive Madison, WI 53718	Tel: 608-224-2830 Fax:
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Boring Number MW-311

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
S5	34		16	LEAN CLAY, very dark gray (2.5Y 3/1). (continued)	CL									
			17	SILTY SAND, black (2.5Y 2.5/1).	SM									
			18											
S6	40		19	POORLY GRADED SAND, very dark grayish brown (2.5Y 3/2).	SP									
			20	SILTY SAND, very dark grayish brown (2.5Y 3/2).	SM									
			21											
			22											
S7	45		23	SILT, very dark grayish brown (2.5Y 3/2).	ML									
			24	LEAN CLAY, dark gray (2.5Y 4/1), laminated, organics.	CL									
			25											
			26											
			27											
S8			28	POORLY GRADED SAND, very dark grayish brown (2.5Y 3/2).	SP									
			29	LEAN CLAY, dark gray (2.5Y 4/1), laminated, organics.	CL									
			30											
			31	Same as above except, dark greenish gray (5GY 4/1), shells.										
			32	End of Boring at 32 feet bgs.										

SCS ENGINEERS

Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater Waste Management
 Remediation/Redevelopment Other

Facility/Project Name IPL - Burlington Generating Station SCS#: 25218220.00		License/Permit/Monitoring Number		Boring Number MW312	
Boring Drilled By: Name of crew chief (first, last) and Firm Jeff Crank Roberts Environmental Drilling		Date Drilling Started 5/20/2019		Date Drilling Completed 5/20/2019	
Unique Well No.		DNR Well ID No.		Common Well Name MW312	
Final Static Water Level 531.08 Feet		Surface Elevation 533.8 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated; <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane 279,576 N, 2,300,970 E S/C/N		Local Grid Location	
SE 1/4 of SW 1/4 of Section 29, T 69 N, R 2		Lat _____ "		<input type="checkbox"/> N <input type="checkbox"/> E	
		Long _____ "		Feet <input type="checkbox"/> S Feet <input type="checkbox"/> W	
Facility ID		County Des Moines		Civil Town/City/ or Village Burlington	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1-8	Hydrovaced to 8'										
4	33 67		9	LEAN CLAY, teal/blue, (GLEY1 5/10 GY), trace coarse sand							M			
18	34 57		11	same as above but dark green, (GLEY1 3/10 GY), with gravel.	CL						M			
10	12 58		13	trace organic material							M			
			14	same as above but dark green, (10YR 2/1)										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers 2830 Dairy Drive, Madison, WI 53718	Tel: Fax:
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Boring Number MW312

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
24	14	5 6	14	LEAN CLAY, teal/blue, (GLEY1 5/10 GY), trace coarse sand. (continued)	CL				M					
			16											
			17						M					
			18											
			19						M					
		23 34	20	POORLY GRADED SAND, fine to coarse, (2.5YR 3/2).										
			21						W					
6	01 23		22											
			23		SP				W					
6	12 45		24											
			25						W					
4			26	End of Boring at 26 feet.										

SCS ENGINEERS

Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater Waste Management
 Remediation/Redevelopment Other

Facility/Project Name IPL - Burlington Generating Station SCS#: 25218220.00		License/Permit/Monitoring Number		Boring Number MW313	
Boring Drilled By: Name of crew chief (first, last) and Firm Jeff Crank Roberts Environmental Drilling		Date Drilling Started 5/21/2019		Date Drilling Completed 5/21/2019	
Unique Well No.		DNR Well ID No.		Common Well Name MW313	
Final Static Water Level 531.05 Feet		Surface Elevation 534.0 Feet		Borehole Diameter 8.5 in	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/> State Plane 279,130 N, 2,300,907 E S/C/N		Lat ° ' "		Local Grid Location <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
SE 1/4 of SW 1/4 of Section 29, T 69 N, R 2		Long ° ' "		Feet <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID		County Des Moines		Civil Town/City/ or Village Burlington	

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
			1	Hydrovaced to 8'											
			2												
			3												
			4												
			5												
			6												
			7												
			8												
	8	31 45	9	LEAN CLAY, (GLEY1 4/10Y), trace coarse sand							M				
	8	11 34	11		CL						M				
	8	11 22	13	Trace organic material							M				
			14												
			15												

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature <i>For Zach Watson</i>	Firm SCS Engineers 2830 Dairy Drive, Madison, WI 53718	Tel: Fax:
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Boring Number MW313

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
12	11	11	11	LEAN CLAY, (GLEY1 4/10Y), trace coarse sand. <i>(continued)</i>	CL									
	22	22	16	Same as above but dark gray, (10YR 2/1).										
		11	17											
	22	22	18											
		11	19											
	22	22	20											
18	11	11	21											
	34	34	22											
24	32	32	23											
	34	34	24	Small sand lenses.										
18	11	11	25											
	28	28	26	POORLY GRADED SAND, coarse.										
4			27											
			28											
10	32	32	29											
	46	46	30											
0	13	13	31											
	87	87	32	End of Boring at 32 feet.										

Route To: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name Burlington Generating Station SCS#: 25220055.00		License/Permit/Monitoring Number		Boring Number MW-313A	
Boring Drilled By: Name of crew chief (first, last) and Firm Jeff Crank Roberts Environmental Services		Date Drilling Started 6/23/2020		Date Drilling Completed 6/30/2020	
WI Unique Well No.		DNR Well ID No.		Common Well Name	
Final Static Water Level 12.13 Feet		Surface Elevation 529.35 Feet MSL		Borehole Diameter 8.0 in.	
Local Grid Origin <input type="checkbox"/> (estimated: <input type="checkbox"/>) or Boring Location <input checked="" type="checkbox"/>		State Plane 279,130 N, 2,300,907 E S/C/N		Local Grid Location	
SE 1/4 of SW 1/4 of Section 29, T 69 N, R 2 W		Lat _____ ' _____ "		Feet <input type="checkbox"/> N <input type="checkbox"/> E	
		Long _____ ' _____ "		Feet <input type="checkbox"/> S <input type="checkbox"/> W	
Facility ID		County Des Moines		County Code	
				Civil Town/City/ or Village Burlington	












Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	
			1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Blind drilled to 28' below ground surface. See logs for MW-313 for log information between 0-28' bgs.										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 	Firm SCS Engineers	Tel: Fax:
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This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Boring Number **MW-313A** Use only as an attachment to Form 4400-122. Page **2** of **3**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments		
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200			
			16													
			17													
			18													
			19													
			20													
			21													
			22													
			23													
			24													
			25													
			26													
			27													
			28													
S1/S2	12	22 68	29	POORLY GRADED SAND, fine to medium grain, grayish brown.												
			30	Same							W					Started two jar samples from 28-30' bgs. Roberts began pumping water into augers to keep sand from backing up into augers.
S3	12	58 1112	31								W					
			32	Same, fine to coarse grain, grayish brown, trace gravel and clay.							W					
S4	14	34 55	33								W					
			34	Same	SP											
S5	5	13 56	35								W					Switched to 2' sample every five feet.
			36													
			37													
			38													
			39													
			40													

Boring Number **MW-313A** Use only as an attachment to Form 4400-122. Page **3** of **3**

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
Number and Type	Length Att. & Recovered (in)								Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200		
S6	10	16 79	41-42	POORLY GRADED SAND, fine to mostly coarse grain, trace gravel, grayish brown.						W					
S7	12	33 811	45-46	Same, fine to medium grain, trace coarse grain.						W					
S8	15	38 2115	50-51	Same, fine to coarse grain.	SP					W					
S9	18	11 01	55-56	Same, mostly fine to medium grain with trace coarse grain and gravel, grayish brown.						W					
S10	16	33 69	60-61	Same fine to coarse grain, grayish brown.						W					
				End of boring at 62' below ground surface. Set well at 61' bgs.											Took two jar samples from 55-57' bgs and 60-62' bgs and combined them



IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____
 Well or Piezometer No: MW-301
 Dates Started: 2/29/16 Date Completed: 2/29/16

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (± 0.5 ft): _____ Specify corner of site: <u>SE of Parcel 16-29-300-007</u>	Name & Address of Construction Company: _____ <u>Direct Push Analytical Corp</u>
Distance & direction along boundary: <u>119' W</u>	<u>4N969 Old LaFox Road, Unit E</u>
Distance & direction from boundary to wall: <u>356' N</u>	<u>St. Charles, IL 60175</u>
Elevations (± 0.01 ft MSL): _____	Name of Driller: <u>Kevin Collins</u>
Ground Surface: <u>535.98</u>	Drilling Method: <u>Direct Push/4.25" HSA</u>
Top of protective casing: <u>538.75</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>538.38</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Macro Core</u>
Benchmark description: _____	Depth of Boring: <u>29.50 ft bgs</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>24.5</u>	Volume: <u>4.4 cubic ft</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: _____ <u>PVC</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 4 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>29.5 ft</u>	Protective cap: _____
Filter Pack: _____	Material: <u>Steel, vented</u>
Material: _____ <u>NSF R.W Sidley Inc.</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>10/20</u>	Well Cap: _____
Volume: _____ <u>2.25 cubic ft</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Black Hills Bentonite 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (± 0.01 ft below top of inner well casing)	
Water level: <u>15.47 ft</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 45 gallons pumped.</u>	
Average depth of frostline: <u>3.5'</u>	

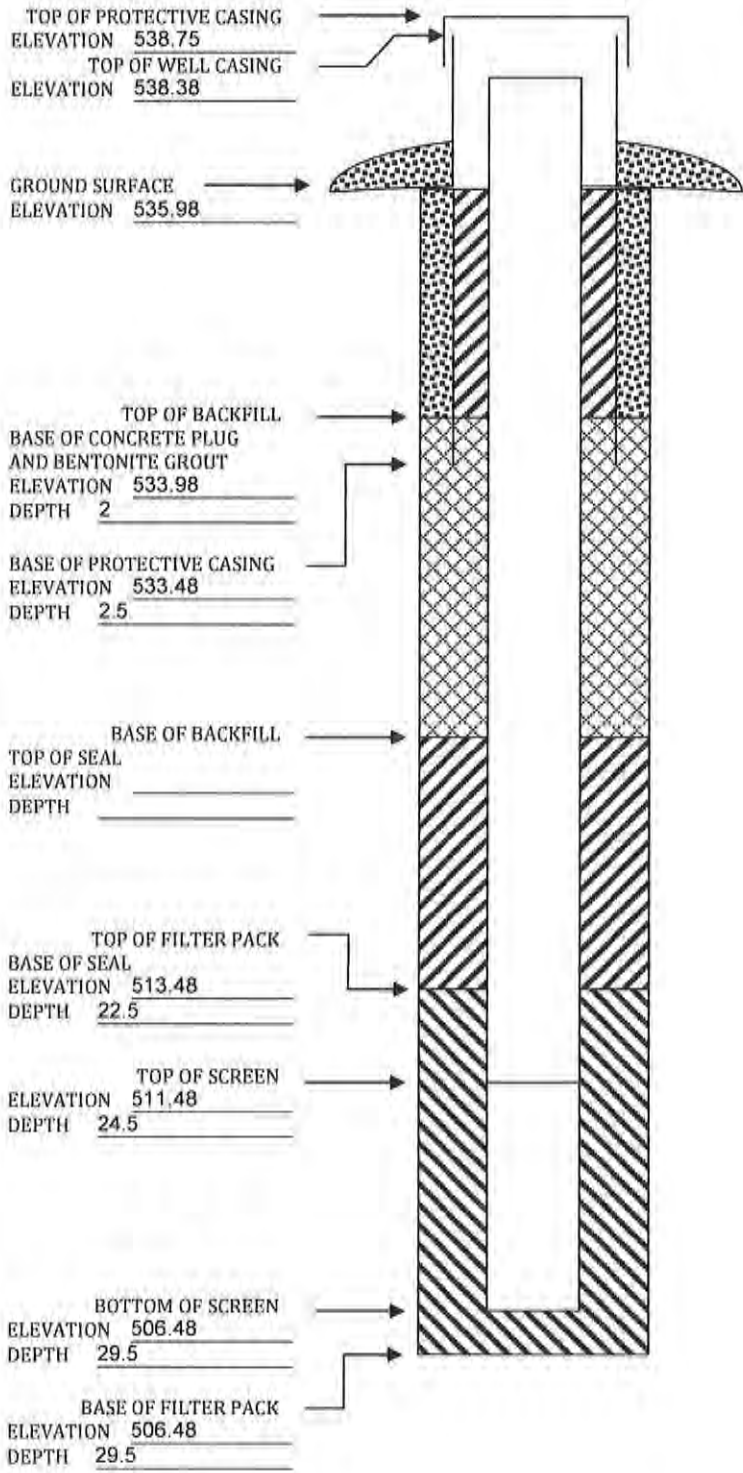
Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr, 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____
 Well or Piezometer No: MW-302
 Dates Started: 2/29/16 Date Completed: 2/29/16

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (± 0.5 ft): _____ Specify corner of site: <u>SE of Parcel 16-29-300-008</u> Distance & direction along boundary: <u>315' W</u> Distance & direction from boundary to wall: <u>34'N</u>	Name & Address of Construction Company: _____ <u>Direct Push Analytical Corp</u> <u>4N969 Old LaFox Road, Unit E</u> <u>St. Charles, IL 60175</u>
Elevations (± 0.01 ft MSL): _____ Ground Surface: <u>533.24</u> Top of protective casing: <u>535.98</u> Top of well casing: _____ <u>535.69</u> Benchmark elevation: _____ Benchmark description: _____	Name of Driller: <u>Kevin Collins</u> Drilling Method: <u>Direct Push/4.25" HSA</u> Drilling Fluid: <u>NA</u> Bore Hole Diameter: <u>8.5 inch</u> Soil Sampling Method: <u>Macro Core</u> Depth of Boring: <u>28 ft bgs</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>22.5</u>	Volume: <u>2.7 cubic ft</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: _____ <u>PVC</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 4 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>27.5</u>	Protective cap: _____
Filter Pack: _____	Material: <u>Steel, vented</u>
Material: _____ <u>NSF R.W Sidley Inc.</u>	Vented: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>10/20</u>	Well Cap: _____
Volume: _____ <u>1.25 cubic ft</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Black Hills Bentonite 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (± 0.01 ft below top of inner well casing)	
Water level: <u>12.70 ft</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 68.5 gallons pumped.</u>	
Average depth of frostline: <u>3.5</u>	

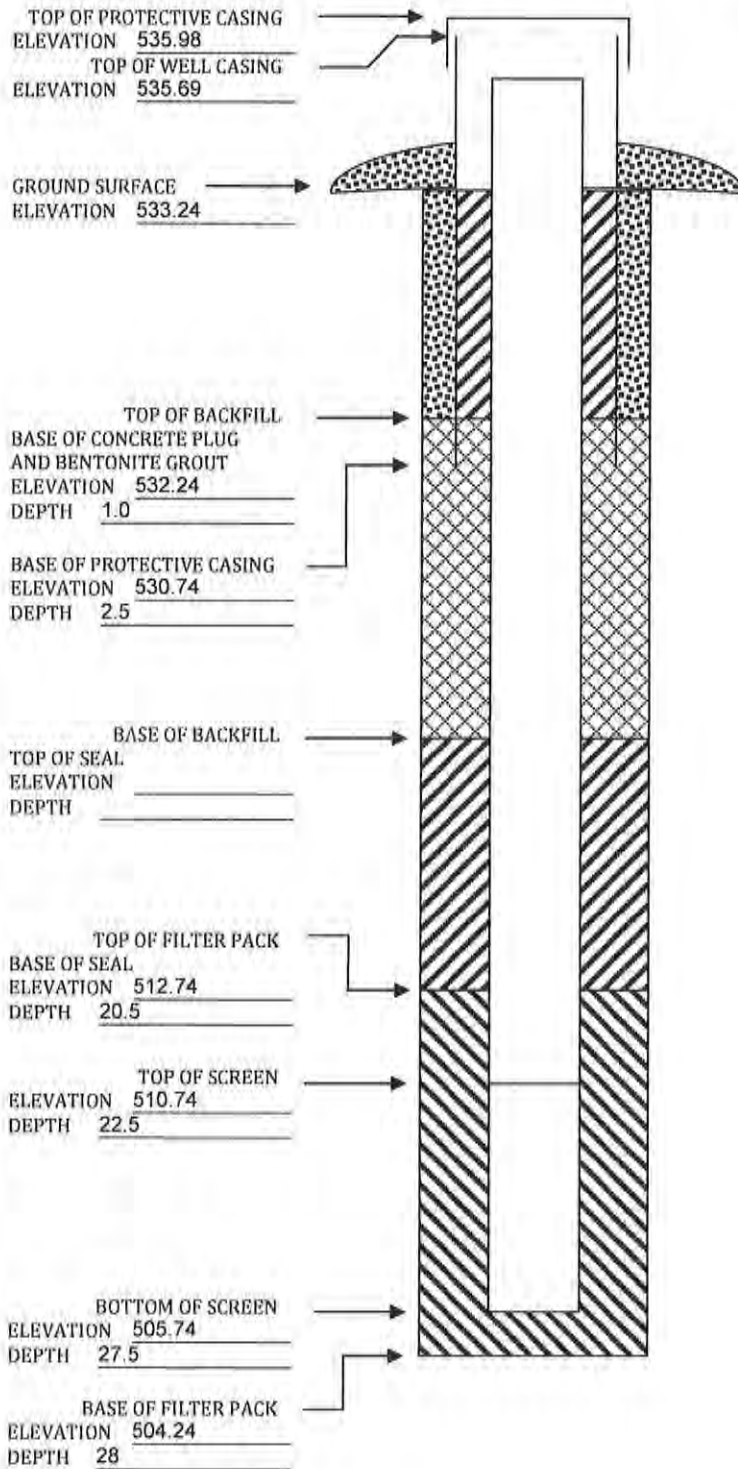
Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name Burlington Generating Station Permit No. _____
Well or Piezometer No. MW-302A Dates Started 6/30/2020 Date Completed 7/1/2020

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site South East Corner Distance and direction along boundary _____
Distance and direction from boundary to surface monitoring well _____
Elevation (+0.01 ft. MSL) _____
Ground Surface 533.51' Top of protective casing 536.28'
Top of well casing 535.89' Benchmark elevation _____
Benchmark description _____

B. SOIL BORING INFORMATION

Construction Company Name Roberts Environmental Drilling
Address 1107 S Mulberry St City, State, Zip Code Millstadt, IL 62260
Name of driller Jeff Crank
Drilling method Hollow Stem Auger Drilling fluid Water Bore Hole diameter 4.25"
Soil sampling method Split spoon Depth of boring 61'

C. MONITORING WELL INSTALLATION

Casing material Sch. 40 PVC Placement method Pumped
Length of casing 62.5' Volume 8, 50lbs bags (120 gallons of grout)
Outside casing diameter 2.4" Backfill (if different from seal): _____
Inside casing diameter 2" Material 3/8" Bentonite chips
Casing joint type Threaded Placement method Poured
Casing/screen joint type Threaded Volume 3, 50lbs bags
Screen material Sch. 40 PVC Surface seal design: Stick-up
Screen opening size 0.01 Material of protective casing: steel
Material of grout between
Screen length 5' protective casing and well casing: Sand
Depth of Well 60' Protective cap: _____
Filter Pack: _____ Material Steel
Material Sand (FilterSil) Vented?: Y N Locking?: Y N
Grain Size 18-23 Well cap: Lockable expanding well plug
Volume 2, 50lbs bags Material Plastic
Seal (minimum 3 ft. length above filter pack): _____ Vented?: Y N
Material Bentonite grout

D. GROUNDWATER MEASUREMENT (+0.01 foot below top of inner well casing)

Water level 14.25' Stabilization time < 5 min
Well development method Surged with bailer and pumped
Average depth of frost line 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature Jeff Crank Certification # 8515 Date 9-16-20

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2 inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

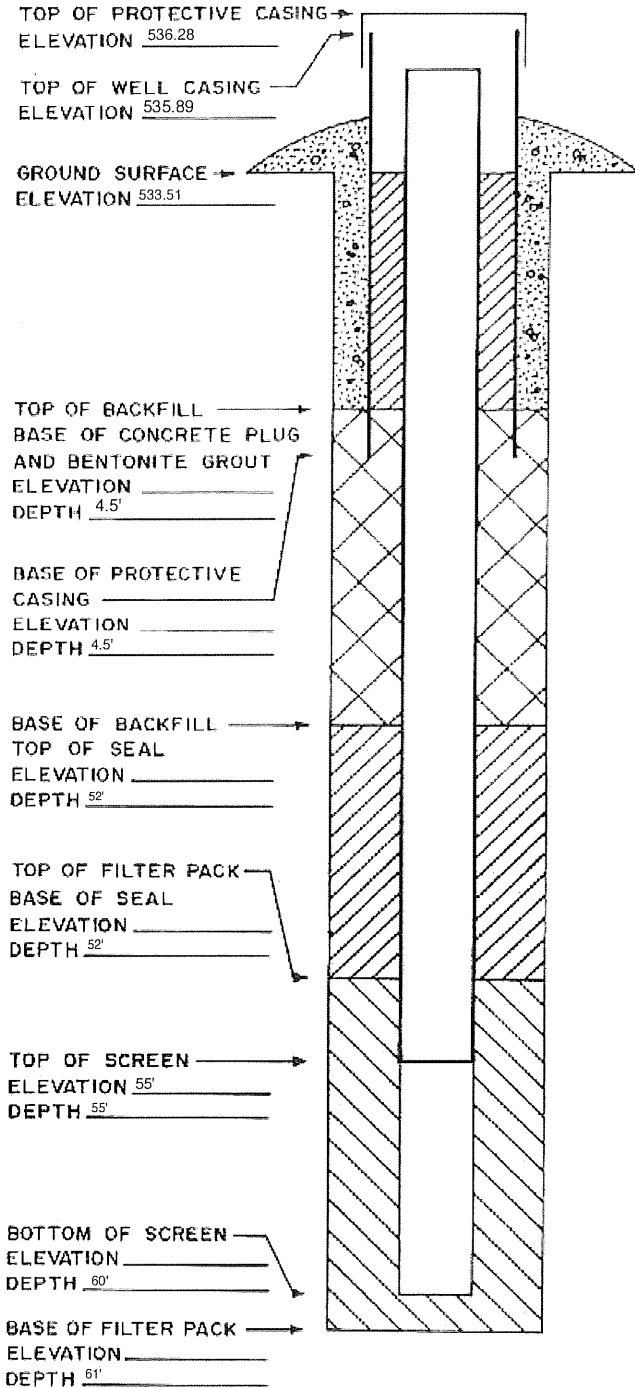
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/2017 cmc

DNR Form 542-1277

ELEVATIONS: ± 0.01 FT. MSL
DEPTHS: ± 0.1 FT. FROM
GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-303

Dates Started: 12/15/15 Date Completed: 12/15/15

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (\pm 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>SE of Parcel 16-29-300-008</u>	<u>Cascade Drilling, LP</u>
Distance & direction along boundary: <u>89' W</u>	<u>301 Alderson St</u>
Distance & direction from boundary to wall: <u>139' N</u>	<u>Schofield, WI 54476</u>
Elevations (\pm 0.01 ft MSL): _____	Name of Driller: <u>Mike Mueller</u>
Ground Surface: <u>531.01</u>	Drilling Method: <u>4.25" HSA</u>
Top of protective casing: <u>534.08</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>533.6</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Spoon</u>
Benchmark description: _____	Depth of Boring: <u>27 ft</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>21 ft</u>	Volume: <u>7.4 cubic ft</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: _____ <u>PVC</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 6 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>26 ft</u>	Protective cap: _____
Filter Pack: _____	Material: <u>steel, vented</u>
Material: _____ <u>Red Flint</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>#40</u>	Well Cap: _____
Volume: _____ <u>2.5 cubic ft</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Hole Plug 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (\pm 0.01 ft below top of inner well casing)	
Water level: <u>10.55 ft</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 147 gallons pumped.</u>	
Average depth of frostline: <u>3.5'</u>	

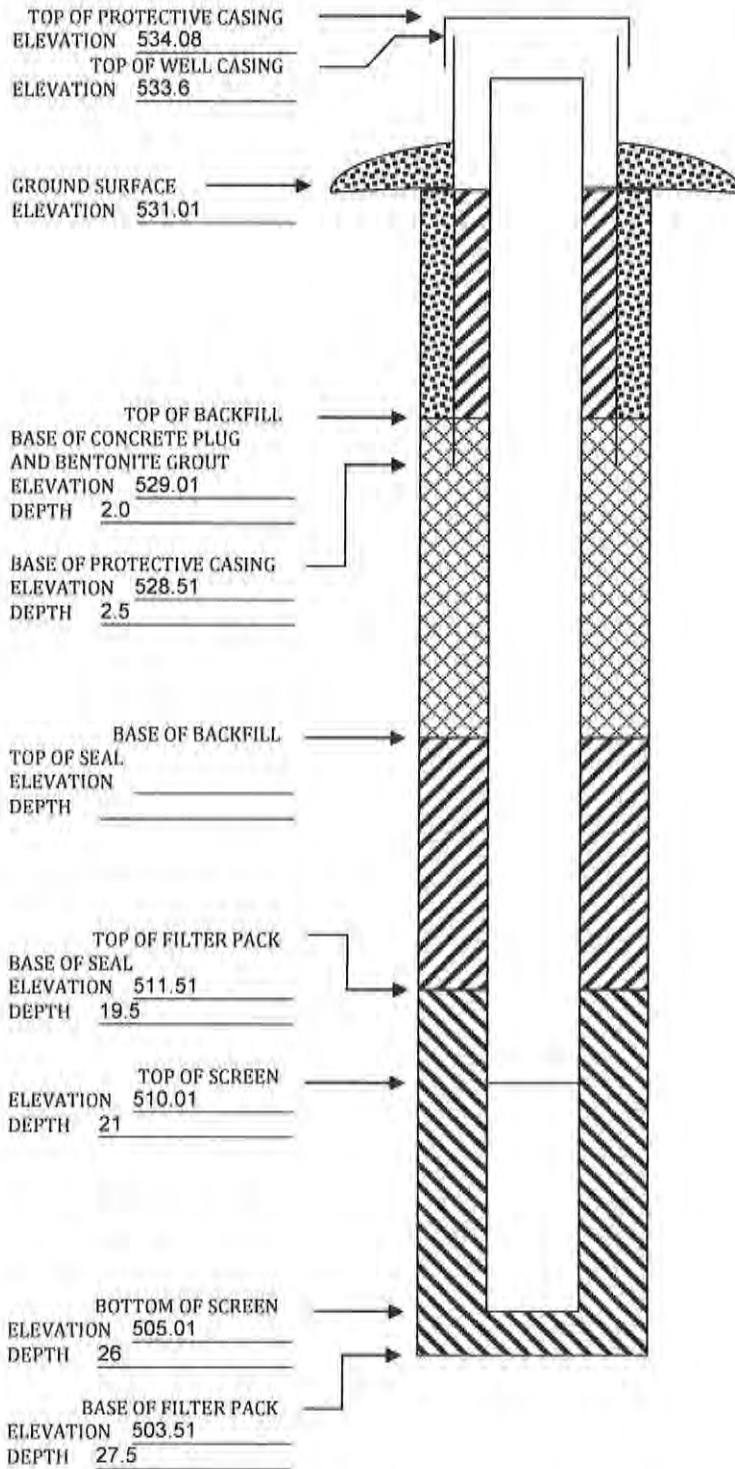
Attachments: Driller's log, Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____
 Well or Piezometer No: MW-304
 Dates Started: 12/15/15 Date Completed: 12/15/15

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (\pm 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>SE of Parcel 16-29-300-008</u>	<u>Cascade Drilling, LP</u>
Distance & direction along boundary: <u>61' W</u>	<u>301 Alderson St</u>
Distance & direction from boundary to wall: <u>558' N</u>	<u>Schofield, WI 54476</u>
Elevations (\pm 0.01 ft MSL): _____	Name of Driller: <u>Mike Mueller</u>
Ground Surface: <u>532.15</u>	Drilling Method: <u>4.25" HSA</u>
Top of protective casing: <u>535.00</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>534.42</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Spoon</u>
Benchmark description: _____	Depth of Boring: <u>27 ft</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>18 ft</u>	Volume: <u>4 cubic ft</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: _____ <u>PVC</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 6 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>23 ft</u>	Protective cap: _____
Filter Pack: _____	Material: <u>steel, vented</u>
Material: _____ <u>Red Flint</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>#40</u>	Well Cap: _____
Volume: _____ <u>2.0 cubic ft</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Hole Plug 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (\pm 0.01 ft below top of inner well casing)	
Water level: <u>11.34 ft</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 136 gallons pumped.</u>	
Average depth of frostline: <u>3.5'</u>	

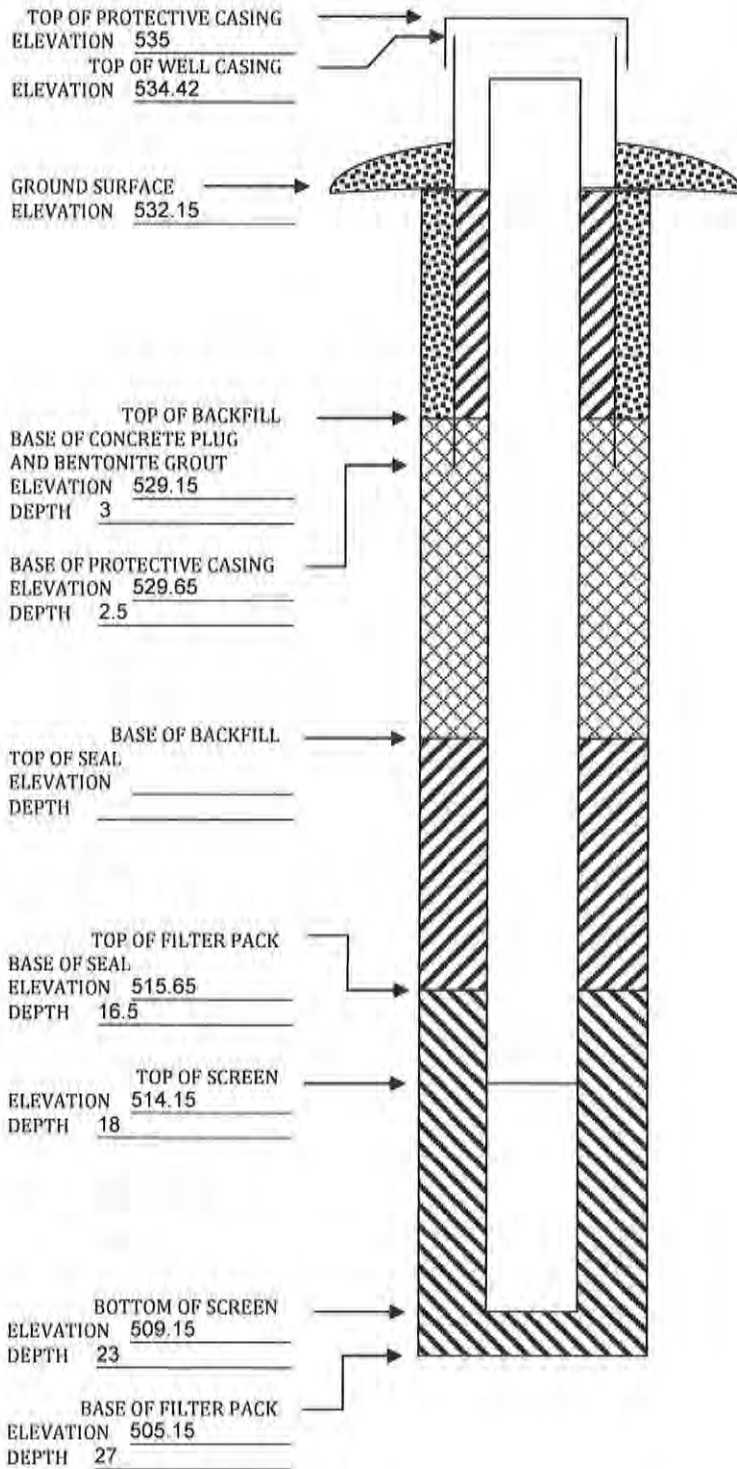
Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-305

Dates Started: 12/17/15 Date Completed: 12/17/15

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (± 0.5 ft): Specify corner of site: <u>NW of Parcel 16-29-300-006</u>	Name & Address of Construction Company: <u>Cascade Drilling, LP</u>
Distance & direction along boundary: <u>475' S</u>	<u>301 Alderson St</u>
Distance & direction from boundary to wall: <u>297' E</u>	<u>Schofield, WI 54476</u>
Elevations (± 0.01 ft MSL):	Name of Driller: <u>Mike Mueller</u>
Ground Surface: <u>530.85</u>	Drilling Method: <u>4.25" HSA</u>
Top of protective casing: <u>533.93</u>	Drilling Fluid: <u>NA</u>
Top of well casing: <u>533.28</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Spoon</u>
Benchmark description: _____	Depth of Boring: <u>27.5 ft</u>

C. MONITORING WELL INSTALLATION	
Casing material: <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____	Volume: <u>5.4 cubic ft</u>
Outside casing diameter: <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: <u>2"</u>	Material: _____
Casing joint type: <u>threaded</u>	Placement method: _____
Casing/screen joint type: <u>threaded</u>	Volume: _____
Screen material: <u>PVC</u>	Surface seal design: _____
Screen opening size: <u>0.010"</u>	Material of protective casing: <u>Steel 6 inch</u>
Screen length: <u>5</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: <u>32</u>	Protective cap: _____
Filter Pack:	Material: <u>Steel, vented</u>
Material: <u>Red Flint</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: <u>#40</u>	Well Cap: _____
Volume: <u>2.0 cubic ft</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Hole Plug 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (± 0.01 ft below top of inner well casing)	
Water level: <u>10.04 ft</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 184 gallons pumped.</u>	
Average depth of frostline: <u>3.5'</u>	

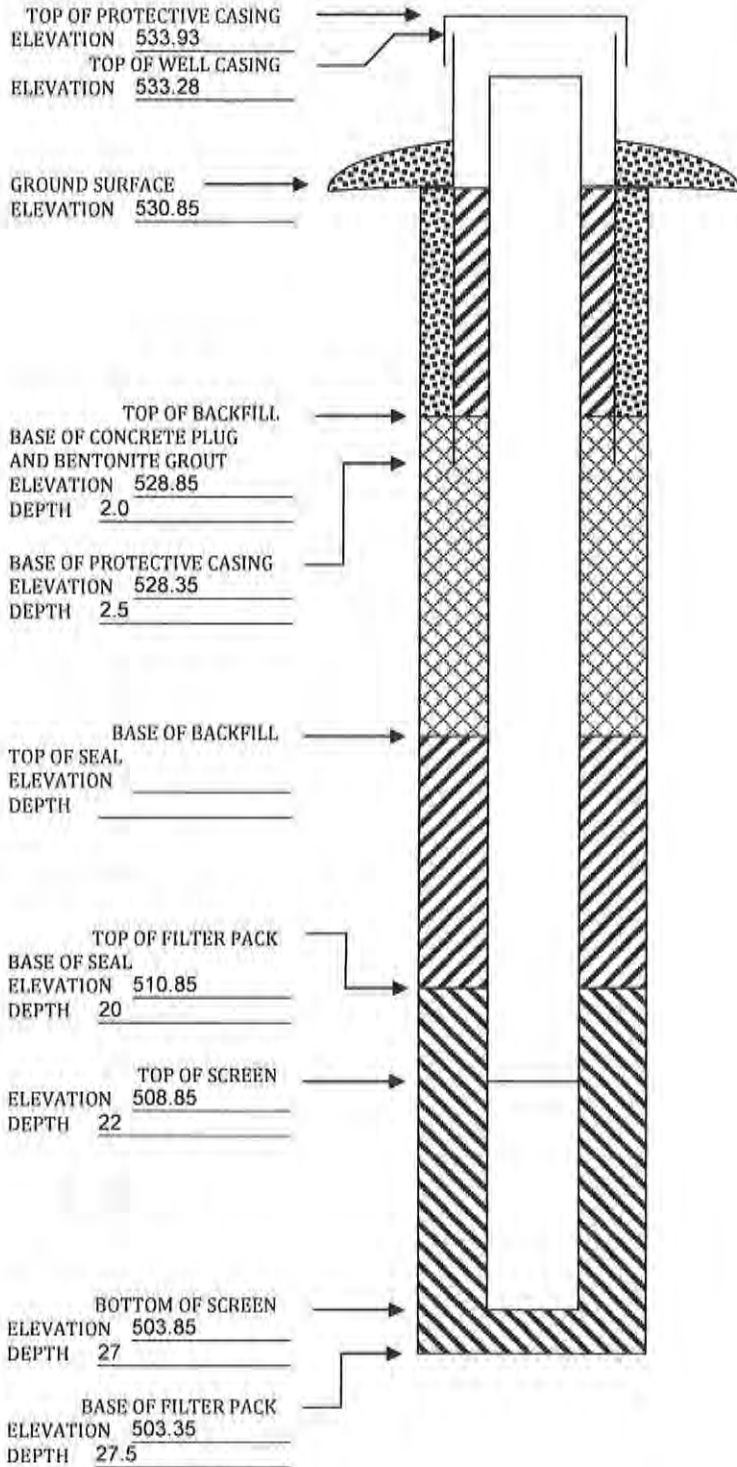
Attachments: Driller's log, Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-306

Dates Started: 12/16/15 Date Completed: 12/17/15

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (\pm 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>SW of Parcel 16-29-300-006</u>	<u>Cascade Drilling, LP</u>
Distance & direction along boundary: <u>328' N</u>	<u>301 Alderson St</u>
Distance & direction from boundary to wall: <u>210' E</u>	<u>Schofield, WI 54476</u>
Elevations (\pm 0.01 ft MSL): _____	Name of Driller: <u>Mike Mueller</u>
Ground Surface: <u>534.51</u>	Drilling Method: <u>4.25" HSA</u>
Top of protective casing: <u>537.44</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>536.92</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Spoon</u>
Benchmark description: _____	Depth of Boring: <u>32.5 ft</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>27 ft</u>	Volume: <u>6.7 cubic ft.</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: _____ <u>PVC</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 6 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>32 ft</u>	Protective cap: _____
Filter Pack: _____	Material: <u>Steel, vented</u>
Material: _____ <u>Red Flint</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>#40</u>	Well Cap: _____
Volume: _____ <u>2.5 cubic ft</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Hole Plug 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (\pm 0.01 ft below top of inner well casing)	
Water level: <u>13.65</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 120 gallons pumped.</u>	
Average depth of frostline: <u>3.5</u>	

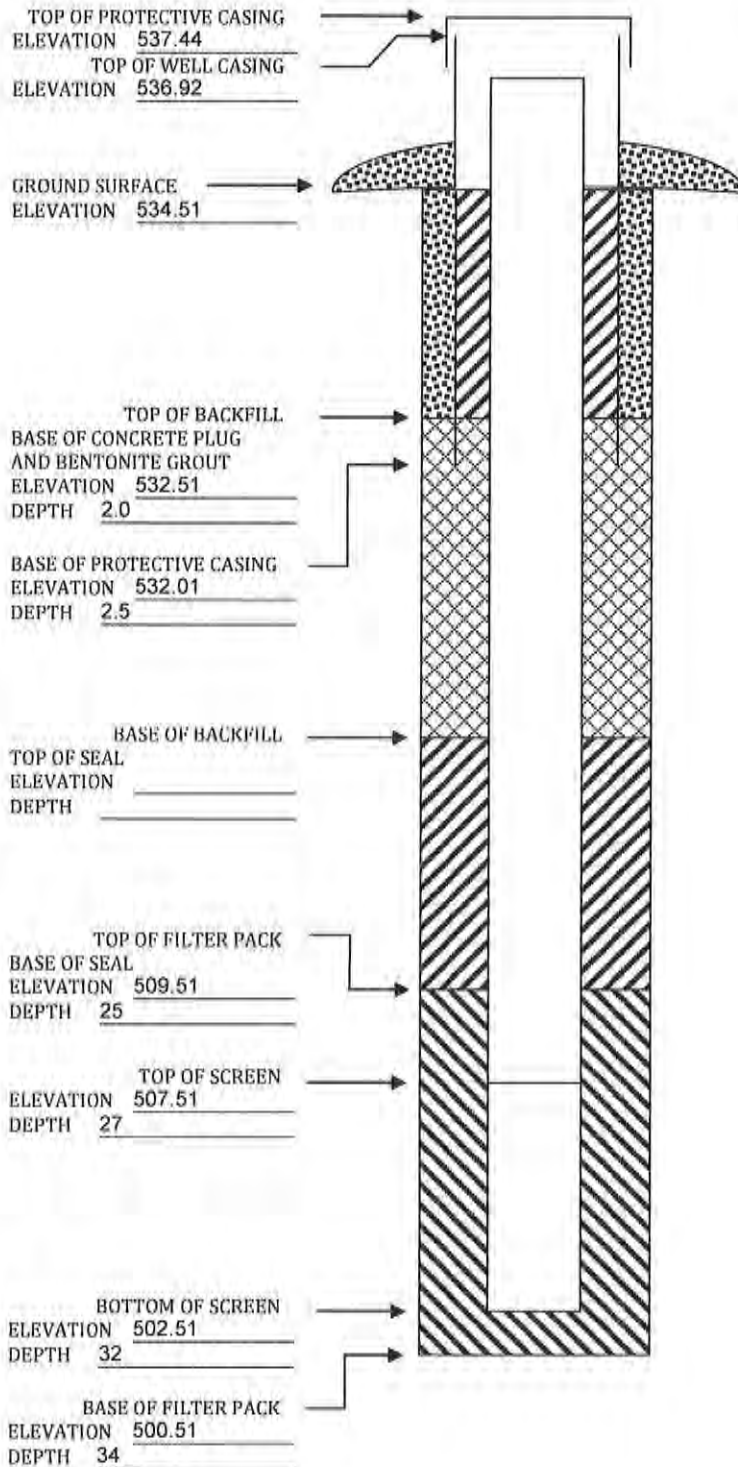
Attachments: Driller's log, Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-307

Dates Started: 12/16/15 Date Completed: 12/16/15

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (± 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>SW of Parcel 16-29-300-006</u>	<u>Cascade Drilling, LP</u>
Distance & direction along boundary: <u>201' N</u>	<u>301 Alderson St</u>
Distance & direction from boundary to wall: <u>177' E</u>	<u>Schofield, WI 54476</u>
Elevations (± 0.01 ft MSL): _____	Name of Driller: <u>Mike Mueller</u>
Ground Surface: <u>534.32</u>	Drilling Method: <u>4.25" HSA</u>
Top of protective casing: <u>537.54</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>536.96</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Spoon</u>
Benchmark description: _____	Depth of Boring: <u>27 ft</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>21 ft</u>	Volume: <u>6 cubic ft.</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: _____ <u>PVC</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 6 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>27 ft</u>	Protective cap: _____
Filter Pack: _____	Material: <u>Steel, vented</u>
Material: _____ <u>Red Flint</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>#40</u>	Well Cap: _____
Volume: _____ <u>2 cubic ft</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Hole Plug 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (± 0.01 ft below top of inner well casing)	
Water level: <u>13.34 ft</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 137 gallons pumped.</u>	
Average depth of frostline: <u>3.5'</u>	

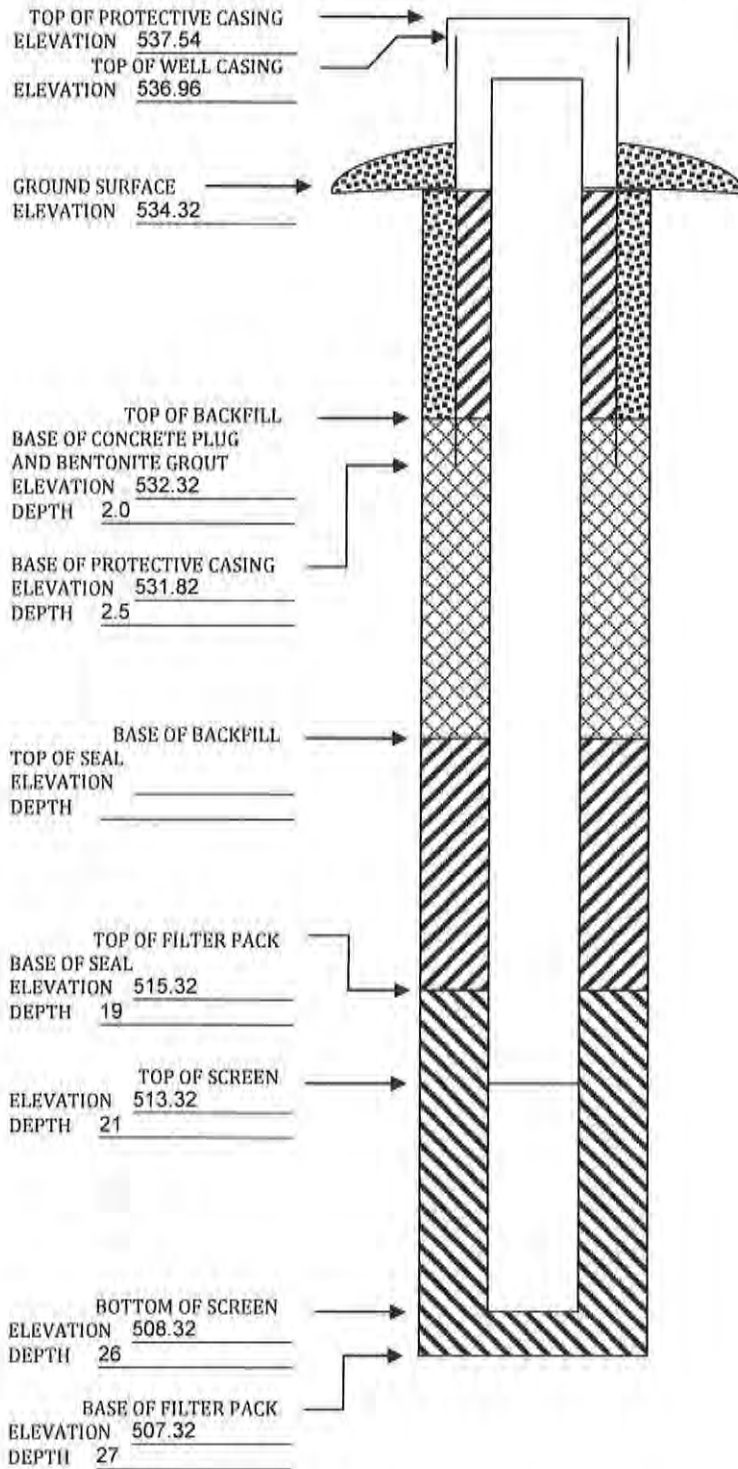
Attachments: Driller's log, Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name Burlington Generating Station Permit No. _____
Well or Piezometer No. MW-307A Dates Started 6/24/2020 Date Completed 7/1/2020

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site SW of Parcel 16-29-300-00 Distance and direction along boundary 201' N
Distance and direction from boundary to surface monitoring well 177' E
Elevation (+0.01 ft. MSL) _____
Ground Surface 533.94' Top of protective casing 536.67'
Top of well casing 536.22' Benchmark elevation _____
Benchmark description _____

B. SOIL BORING INFORMATION

Construction Company Name Roberts Environmental Drilling
Address 1107 S Mulberry St City, State, Zip Code Millstadt, IL 62260
Name of driller Jeff Crank
Drilling method Hollow Stem Auger Drilling fluid Water Bore Hole diameter 4.25"
Soil sampling method Split spoon Depth of boring 60'

C. MONITORING WELL INSTALLATION

Casing material <u>Sch. 40 PVC</u>	Placement method <u>Pumped</u>
Length of casing <u>61.92'</u>	Volume <u>7, 50lbs bags (~115 gallons of grout)</u>
Outside casing diameter <u>2.4"</u>	Backfill (if different from seal): _____
Inside casing diameter <u>2"</u>	Material <u>3/8" Bentonite chips</u>
Casing joint type <u>Threaded</u>	Placement method <u>Poured</u>
Casing/screen joint type <u>Threaded</u>	Volume <u>5, 50lbs bags</u>
Screen material <u>Sch. 40 PVC</u>	Surface seal design: <u>Stick-up</u>
Screen opening size <u>0.01</u>	Material of protective casing: <u>steel</u>
Screen length <u>5'</u>	Material of grout between protective casing and well casing: <u>Sand</u>
Depth of Well <u>59'</u>	Protective cap: _____
Filter Pack: _____	Material <u>Steel</u>
Material <u>Sand (FilterSil)</u>	Vented?: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Locking?: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Grain Size <u>18-23</u>	Well cap: <u>Lockable expanding well plug</u>
Volume <u>3, 50lbs bags</u>	Material <u>Plastic</u>
Seal (minimum 3 ft. length above filter pack): _____	Vented?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Material <u>Bentonite grout</u>	

D. GROUNDWATER MEASUREMENT (± 0.01 foot below top of inner well casing)

Water level 14.37' Stabilization time <5 min
Well development method Surged with bailer and pumped
Average depth of frost line 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature *Jeff Crank* Certification # 8515 Date 9-16-20

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2 inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

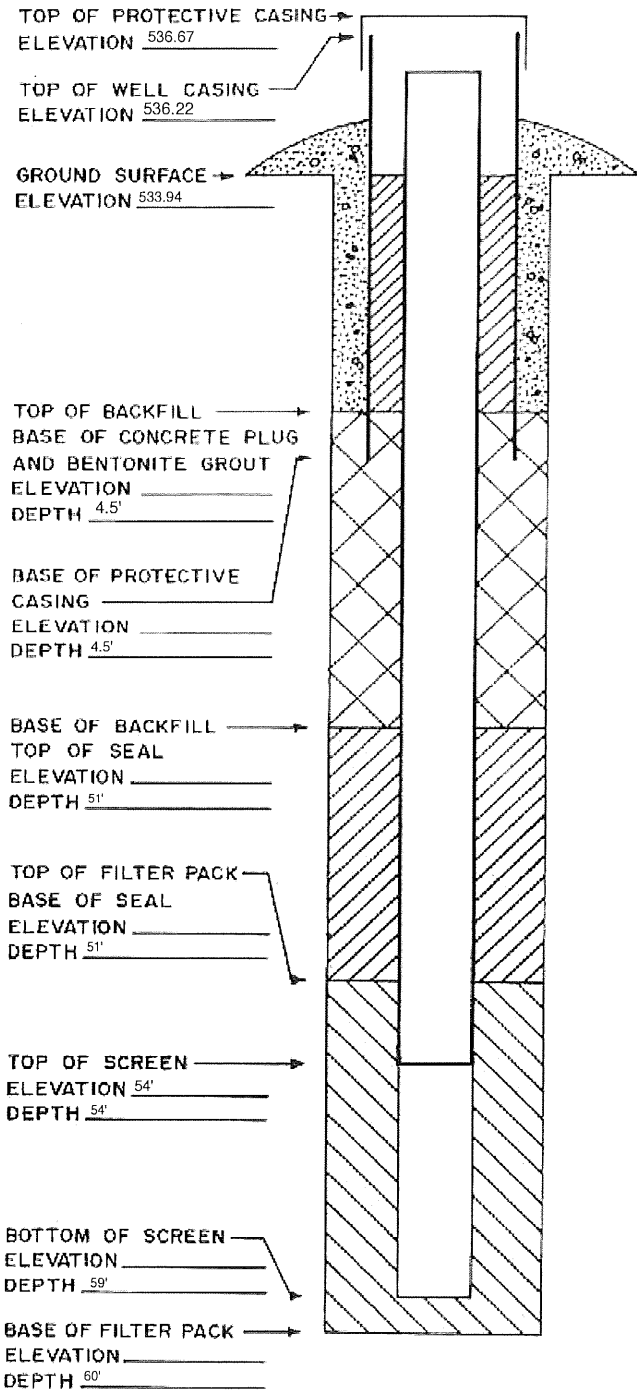
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/2017 cmc

DNR Form 542-1277

ELEVATIONS: ± 0.01 FT. MSL
DEPTHS: ± 0.1 FT. FROM
GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-308

Dates Started: 12/15/15 Date Completed: 12/16/15

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (\pm 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>SW of Parcel 16-29-300-006</u>	<u>Cascade Drilling, LP</u>
Distance & direction along boundary: <u>33' N</u>	<u>301 Alderson St</u>
Distance & direction from boundary to wall: <u>130' E</u>	<u>Schofield, WI 54476</u>
Elevations (\pm 0.01 ft MSL): _____	Name of Driller: <u>Mike Mueller</u>
Ground Surface: <u>534.89</u>	Drilling Method: <u>4.25" HSA</u>
Top of protective casing: <u>537.74</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>537.20</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Spoon</u>
Benchmark description: _____	Depth of Boring: <u>29.5 ft</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>23 ft</u>	Volume: <u>6 cubic ft.</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: _____ <u>PVC</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 6 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>28 ft</u>	Protective cap: _____
Filter Pack: _____	Material: <u>steel, vented</u>
Material: _____ <u>Red Flint</u>	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Locking: <input type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>#40</u>	Well Cap: _____
Volume: _____ <u>2 cubic ft.</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Hole Plug 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (\pm 0.01 ft below top of inner well casing)	
Water level: <u>13.95</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 151 gallons pumped.</u>	
Average depth of frostline: <u>3.5'</u>	

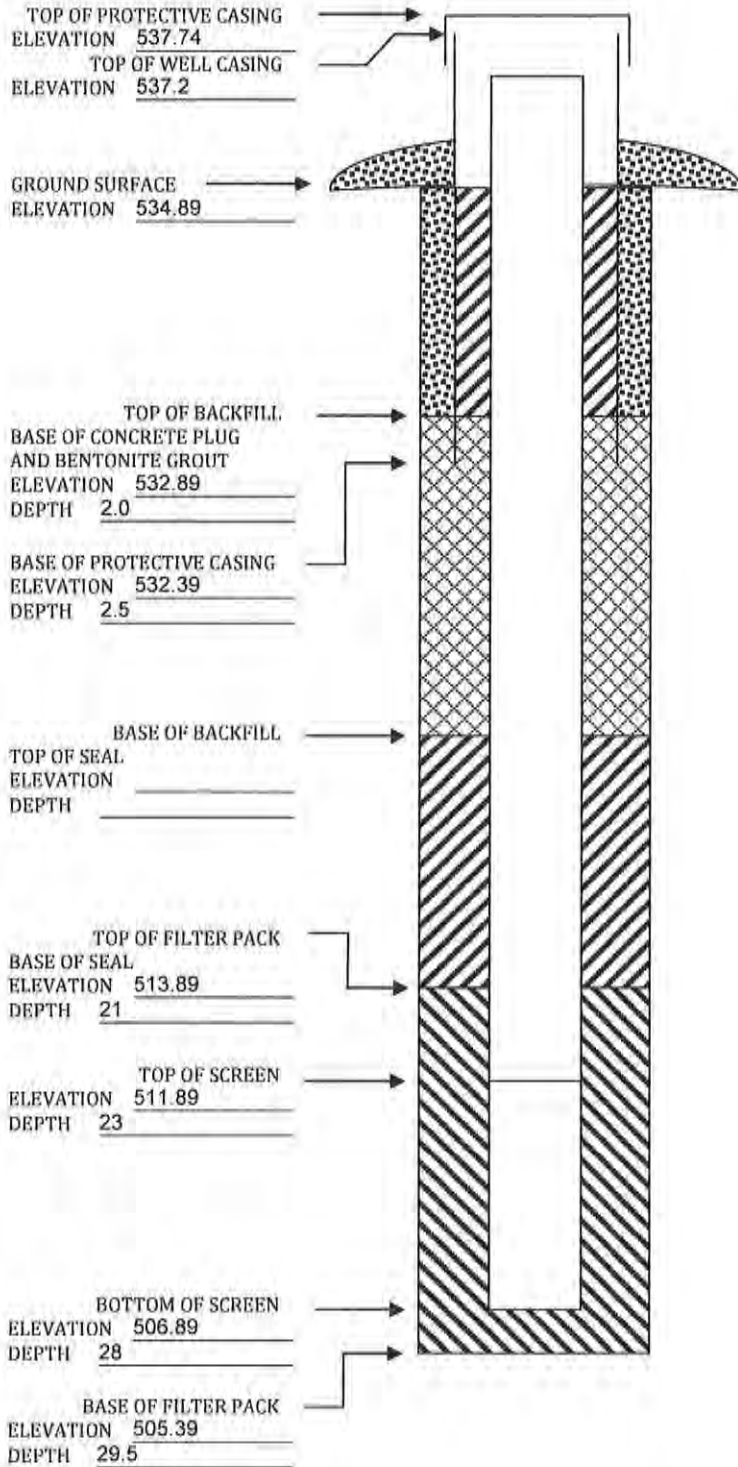
Attachments: Driller's log, Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-309

Dates Started: 3/1/16 Date Completed: 3/1/16

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (± 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>NE of Parcel 16-29-300-007</u>	<u>Direct Push Analytical Corp</u>
Distance & direction along boundary: <u>141' S</u>	<u>4N969 Old LaFox Road, Unit E</u>
Distance & direction from boundary to wall: <u>123' W</u>	<u>St. Charles, IL 60175</u>
Elevations (± 0.01 ft MSL): _____	Name of Driller: <u>Kevin Collins</u>
Ground Surface: <u>534.11</u>	Drilling Method: <u>Direct Push/4.25" HSA</u>
Top of protective casing: <u>536.70</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>536.42</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Macro Core</u>
Benchmark description: _____	Depth of Boring: <u>25 ft bgs</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>20</u>	Volume: <u>2 cubic ft.</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: <u>3/8 Hole Plug</u>
Casing joint type: _____ <u>threaded</u>	Placement method: <u>Gravity</u>
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: <u>PVC with slip cap and 4 stainless screws</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 4 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>25</u>	Protective cap: _____
Filter Pack: _____	Material: <u>steel, vented</u>
Material: _____ <u>NSF R.W Sidley Inc.</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>10/20</u>	Well Cap: _____
Volume: _____ <u>1.50 cubic ft.</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Black Hills Bentonite 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (± 0.01 ft below top of inner well casing)	
Water level: <u>13.18</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 140 gallons pumped.</u>	
Average depth of frostline: _____	

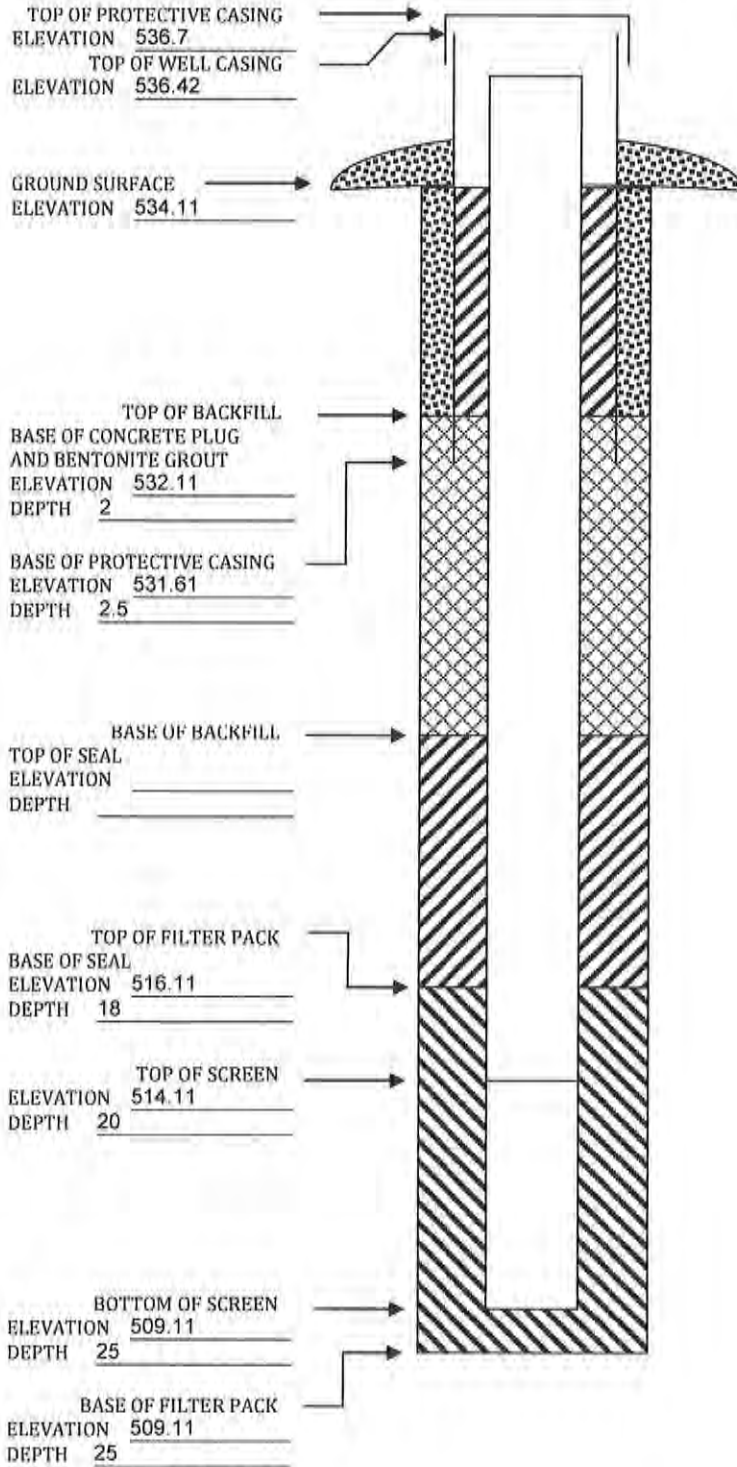
Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-310

Dates Started: 3/1/16 Date Completed: 3/1/16

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (\pm 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>Sullivan Slough RD West ROW</u>	<u>Direct Push Analytical Corp</u>
Distance & direction along boundary: <u>65' S from RR Tracks</u>	<u>4N969 Old LaFox Road, Unit E</u>
Distance & direction from boundary to wall: <u>21' W</u>	<u>St. Charles, IL 60175</u>
Elevations (\pm 0.01 ft MSL): _____	Name of Driller: <u>Kevin Collins</u>
Ground Surface: <u>532.23</u>	Drilling Method: <u>Direct Push/4.25" HSA</u>
Top of protective casing: <u>532.23</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>531.99</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Macro Core</u>
Benchmark description: _____	Depth of Boring: <u>24 ft bgs</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>14</u>	Volume: <u>2.7 cubic ft.</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: <u>PVC with slip cap and 4 stainless screws</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 4 inch</u>
Screen length: _____ <u>5 ft</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>19 ft bgs</u>	Protective cap: _____
Filter Pack: _____	Material: <u>Steel, not vented, flush-mount</u>
Material: _____ <u>NSF R.W Sidley Inc.</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>10/20</u>	Well Cap: _____
Volume: _____ <u>1 cubic ft.</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Black Hills Bentonite 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (\pm 0.01 ft below top of inner well casing)	
Water level: <u>6.58</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 112.5 gallons pumped.</u>	
Average depth of frostline: <u>3.5</u>	

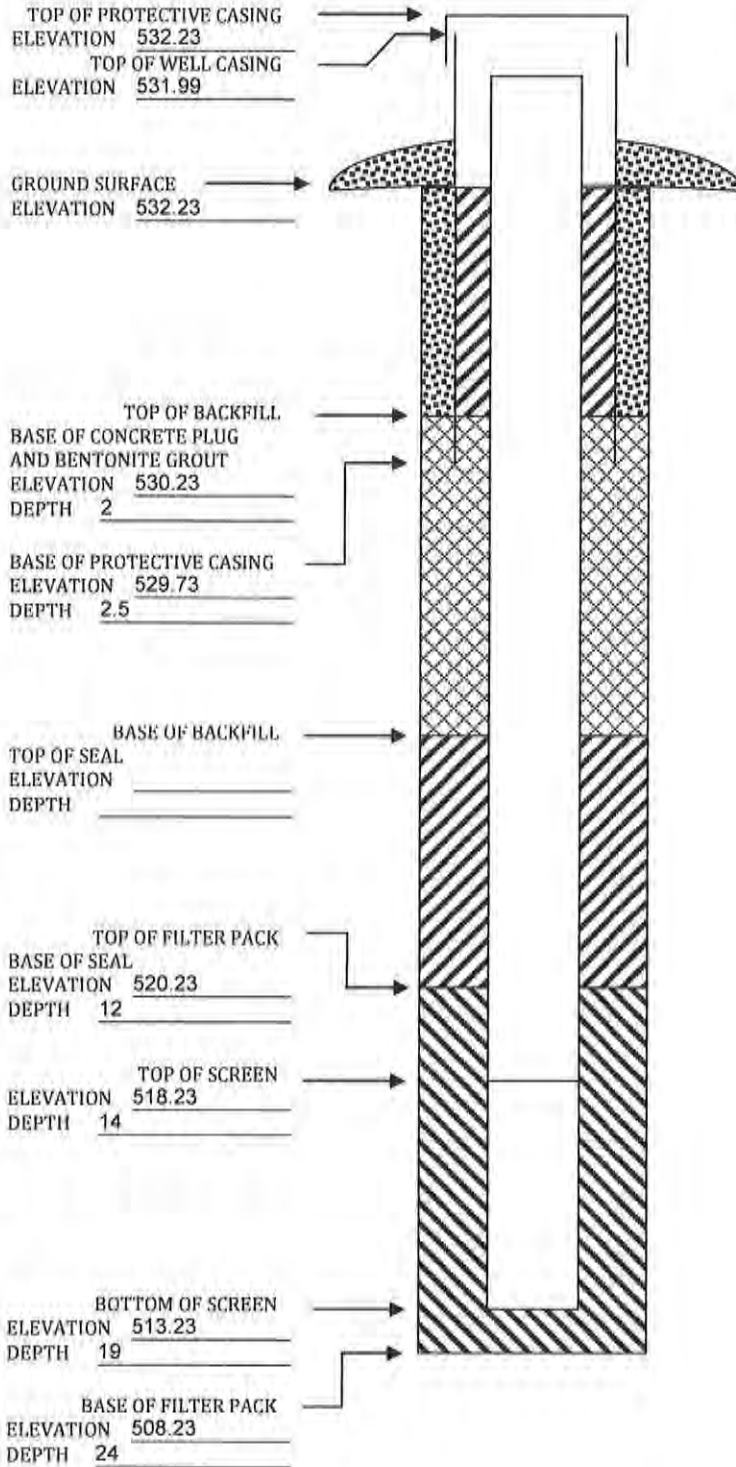
Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name Burlington Generating Station Permit No. _____
Well or Piezometer No. MW-310A Dates Started 6/25/2020 Date Completed 6/26/2020

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site Sullivan Slough Rd WestROW Distance and direction along boundary 75' S from RR Tracks
Distance and direction from boundary to surface monitoring well 21' W
Elevation (+0.01 ft. MSL) _____
Ground Surface 532.91' Top of protective casing 532.91'
Top of well casing 532.53' Benchmark elevation _____
Benchmark description _____

B. SOIL BORING INFORMATION

Construction Company Name Roberts Environmental Drilling
Address 1107 S Mulberry St City, State, Zip Code Millstadt, IL 62260
Name of driller Jeff Crank
Drilling method Hollow Stem Auger Drilling fluid Water Bore Hole diameter 4.25"
Soil sampling method Split spoon Depth of boring 50'

C. MONITORING WELL INSTALLATION

Casing material <u>Sch. 40 PVC</u>	Placement method <u>Pumped</u>
Length of casing <u>49.4'</u>	Volume <u>8, 50lbs bags (~130 gallons of grout)</u>
Outside casing diameter <u>2.4"</u>	Backfill (if different from seal): _____
Inside casing diameter <u>2"</u>	Material <u>3/8" Bentonite chips</u>
Casing joint type <u>Threaded</u>	Placement method <u>Poured</u>
Casing/screen joint type <u>Threaded</u>	Volume <u>23, 50lbs bags</u>
Screen material <u>Sch. 40 PVC</u>	Surface seal design: <u>Flush mount</u>
Screen opening size <u>0.01</u>	Material of protective casing: <u>steel</u>
Screen length <u>5'</u>	Material of grout between protective casing and well casing: <u>Bentonite chips</u>
Depth of Well <u>49'</u>	Protective cap: _____
Filter Pack: _____	Material <u>Steel</u>
Material <u>Sand (FilterSil)</u>	Vented?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Locking?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Grain Size <u>18-23</u>	Well cap: <u>Lockable expanding well plug</u>
Volume <u>3, 50lbs bags</u>	Material <u>Plastic</u>
Seal (minimum 3 ft. length above filter pack): _____	Vented?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Material <u>Bentonite grout</u>	

D. GROUNDWATER MEASUREMENT (+0.01 foot below top of inner well casing)

Water level 8.77' Stabilization time >48 hrs
Well development method Surged with bailer and pumped
Average depth of frost line 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature *Jeff Crank* Certification # 8515 Date 9-16-20

Attachments: Driller's log, Pipe schedules and grouting schedules, 8 1/2 inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

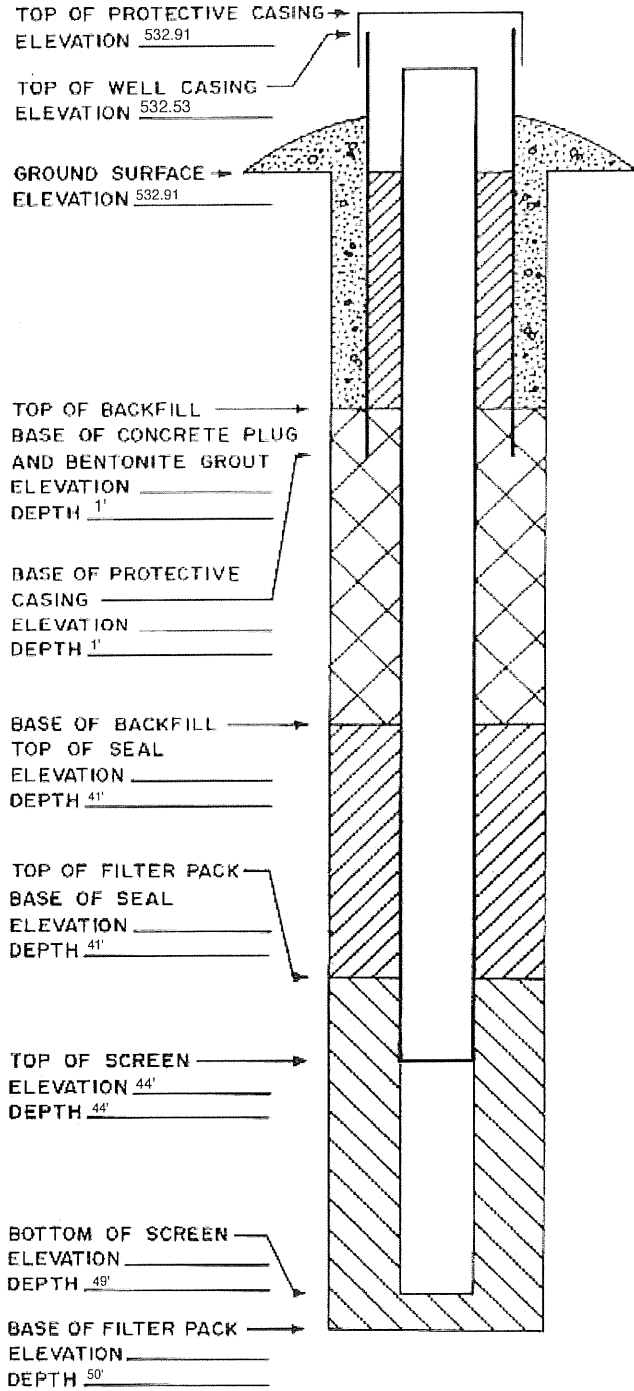
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov

09/2017 cmc

DNR Form 542-1277

ELEVATIONS: ± 0.01 FT. MSL
 DEPTHS: ± 0.1 FT. FROM
 GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
 (SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).





IOWA DEPARTMENT OF NATURAL RESOURCES
MONITORING WELL/PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name: IPL - Burlington Generating Station Permit No.: _____

Well or Piezometer No: MW-311

Dates Started: 3/1/16 Date Completed: 3/1/16

A. SURVEYED LOCATIONS AND ELEVATIONS	B. SOIL BORING INFORMATION
Locations (± 0.5 ft): _____	Name & Address of Construction Company: _____
Specify corner of site: <u>Sullivan Slough RD West ROW</u>	<u>Direct Push Analytical Corp</u>
Distance & direction along boundary: <u>207' S from RR Tracks</u>	<u>4N969 Old LaFox Road, Unit E</u>
Distance & direction from boundary to wall: <u>18' W</u>	<u>St. Charles, IL 60175</u>
Elevations (± 0.01 ft MSL): _____	Name of Driller: <u>Kevin Collins</u>
Ground Surface: <u>532.69</u>	Drilling Method: <u>Direct Push/4.25" HSA</u>
Top of protective casing: <u>532.69</u>	Drilling Fluid: <u>NA</u>
Top of well casing: _____ <u>532.32</u>	Bore Hole Diameter: <u>8.5 inch</u>
Benchmark elevation: _____	Soil Sampling Method: <u>Macro Core</u>
Benchmark description: _____	Depth of Boring: <u>32 ft bgs</u>

C. MONITORING WELL INSTALLATION	
Casing material: _____ <u>PVC</u>	Placement method: <u>Gravity</u>
Length of casing: _____ <u>18</u>	Volume: <u>3.7 cubic ft.</u>
Outside casing diameter: _____ <u>2.38"</u>	Backfill (if different from seal): _____
Inside casing diameter: _____ <u>2"</u>	Material: _____
Casing joint type: _____ <u>threaded</u>	Placement method: _____
Casing/screen joint type: _____ <u>threaded</u>	Volume: _____
Screen material: <u>PVC with slip cap and 4 stainless screws</u>	Surface seal design: _____
Screen opening size: _____ <u>0.010"</u>	Material of protective casing: <u>Steel 4 inch</u>
Screen length: _____ <u>5</u>	Material of grout between protective casing and well casing: <u>sand</u>
Depth of well: _____ <u>23</u>	Protective cap: _____
Filter Pack: _____	Material: <u>steel, not vented, flush-mount</u>
Material: _____ <u>NSF R.W Sidley Inc.</u>	Vented: <input type="checkbox"/> Yes <input type="checkbox"/> No Locking: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Grain size: _____ <u>10/20</u>	Well Cap: _____
Volume: _____ <u>1 cubic ft.</u>	Material: <u>PVC</u>
Seal (minimum 3 ft length above filter pack): _____	Vented: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Material: <u>Black Hills Bentonite 3/8 inch</u>	

D. GROUNDWATER MEASUREMENT (± 0.01 ft below top of inner well casing)	
Water level: <u>8.34 ft</u>	Stabilization Time: <u><5 minutes</u>
Well development method: <u>Surged with block and pumped to reduce turbidity. 99 gallons pumped.</u>	
Average depth of frostline: <u>3.5'</u>	

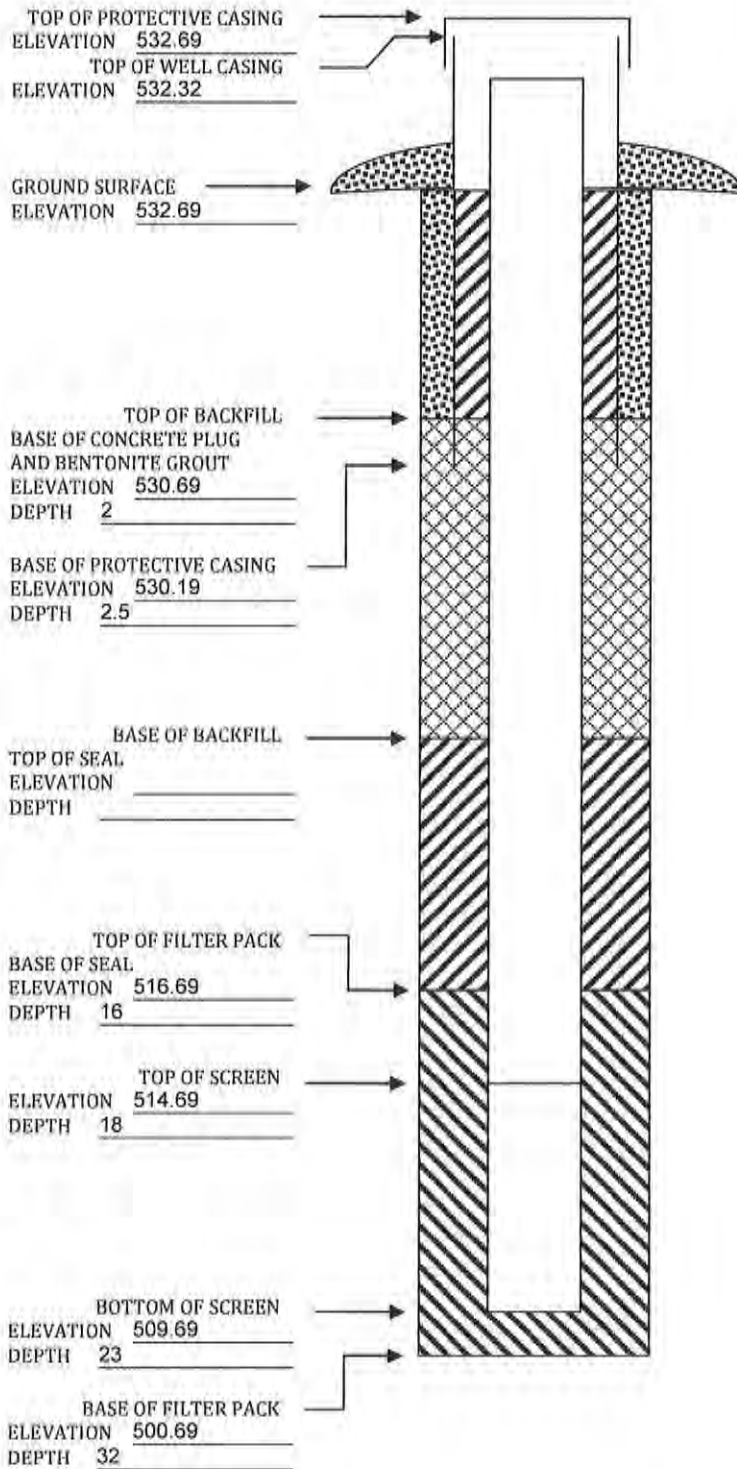
Attachments: Driller's log, Pipe schedules and grouting schedules. 8 1/2x11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed for to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E 9th St, Des Moines IA 50319-0034.

Questions? Call or Email: Nina Koger, Environmental Engineer Sr., 515-281-8986, Nina.Koger@dnr.iowa.gov

ELEVATIONS: ± 0.01 ft MSL
 DEPTHS: ± 0.1 ft FROM GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
 (SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL.)



MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name IPL Burlington Generating Station Permit No. _____
Well or Piezometer No. MW312 Dates Started 5/20/2019 Date Completed 5/21/2019

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site SE Distance and direction along boundary 1,400 N
Distance and direction from boundary to surface monitoring well 200 W
Elevation (+0.01 ft. MSL) _____
Ground Surface 533.80 Top of protective casing 536.83
Top of well casing 536.43 Benchmark elevation _____
Benchmark description _____

B. SOIL BORING INFORMATION

Construction Company Name Roberts Environmental Drilling, Inc.
Address 1107 S Mullberry St. City, State, Zip Code Millstadt, IL 62260
Name of driller Jeff Crank
Drilling method 4.25" HSA Drilling fluid _____ Bore Hole diameter 8.5"
Soil sampling method split spoon Depth of boring 26'

C. MONITORING WELL INSTALLATION

Casing material <u>PVC</u>	Placement method <u>gravity</u>
Length of casing <u>27.65</u>	Volume <u>5 cu. ft.</u>
Outside casing diameter <u>2.4"</u>	Backfill (if different from seal): _____
Inside casing diameter <u>2.0"</u>	Material _____
Casing joint type <u>threaded</u>	Placement method _____
Casing/screen joint type <u>threaded</u>	Volume _____
Screen material <u>PVC</u>	Surface seal design: <u>Concrete</u>
Screen opening size <u>0.01"</u>	Material of protective casing: <u>Steel</u>
	Material of grout between protective casing and well casing: <u>Bentonite</u>
Screen length <u>5'</u>	Protective cap: _____
Depth of Well <u>25'</u>	Material <u>Steel</u>
Filter Pack: _____	Vented?: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Locking?: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Material <u>filter sand</u>	Well cap: <u>Low-flow purge cap</u>
Grain Size <u>#5</u>	Material <u>Plastic</u>
Volume <u>3 cu. ft.</u>	Vented?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Seal (minimum 3 ft. length above filter pack): _____	
Material <u>Bentonite chips</u>	

D. GROUNDWATER MEASUREMENT (+0.01 foot below top of inner well casing)

Water level 4.85 Stabilization time < 1 hr
Well development method Surged and pumped to remove turbidity
Average depth of frost line 4 ft

DRILLER'S CERTIFICATION

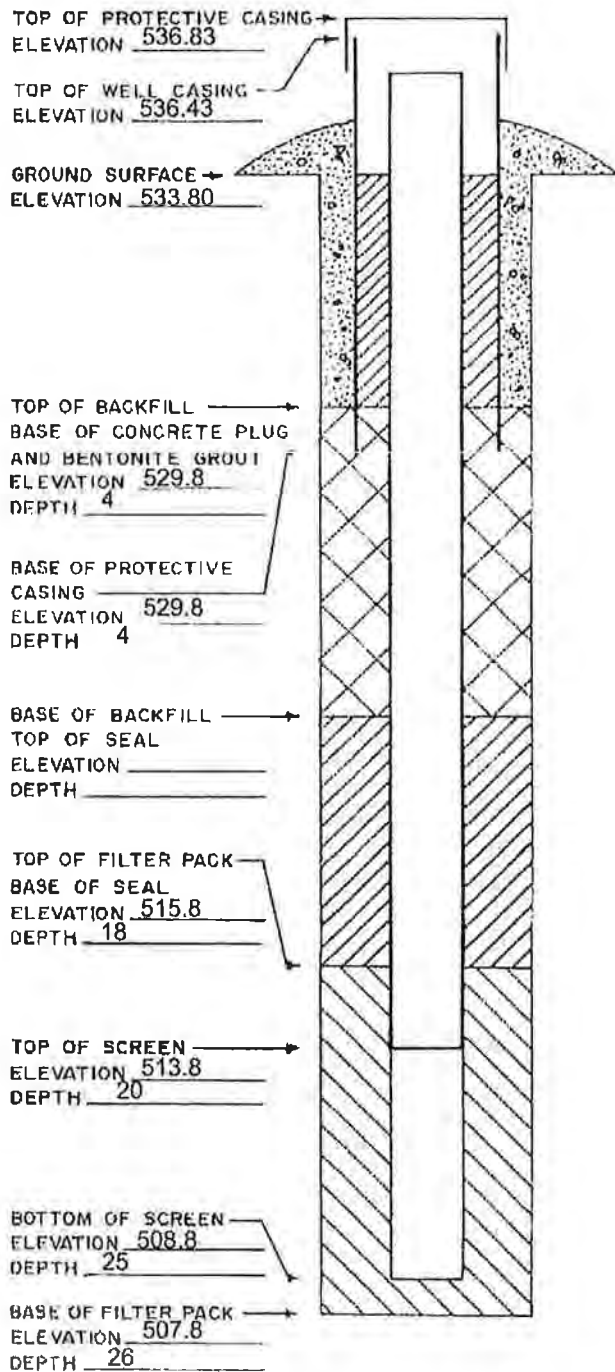
I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature *Jeff Crank* Certification # 8515 Date 8/8/2019

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2 inch x 11 inch map showing locations of all monitoring wells and piezometers.
Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov
09/2017 cmc DNR Form 542-1277

ELEVATIONS: ± 0.01 FT. MSL
 DEPTHS: ± 0.1 FT. FROM
 GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
 (SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL)



MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name IPL Burlington Generating Station Permit No. _____
Well or Piezometer No. MW313 Dates Started 5/21/2019 Date Completed 5/22/2019

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site SE Distance and direction along boundary 890 N
Distance and direction from boundary to surface monitoring well 130 E
Elevation (+0.01 ft. MSL) _____
Ground Surface 533.97 Top of protective casing 536.18
Top of well casing 535.82 Benchmark elevation _____
Benchmark description _____

B. SOIL BORING INFORMATION

Construction Company Name Roberts Environmental Drilling, Inc.
Address 1107 S Mullberry St. City, State, Zip Code Millstadt, IL 62260
Name of driller Jeff Crank
Drilling method 4.25" HSA Drilling fluid water Bore Hole diameter 8.5"
Soil sampling method split spoon Depth of boring 32'

C. MONITORING WELL INSTALLATION

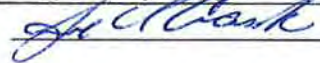
Casing material <u>PVC</u>	Placement method <u>gravity</u>
Length of casing <u>32.99'</u>	Volume <u>7 cu. ft.</u>
Outside casing diameter <u>2.4"</u>	Backfill (if different from seal): _____
Inside casing diameter <u>2.0"</u>	Material _____
Casing joint type <u>threaded</u>	Placement method _____
Casing/screen joint type <u>threaded</u>	Volume _____
Screen material <u>PVC</u>	Surface seal design: <u>Concrete</u>
Screen opening size <u>0.01"</u>	Material of protective casing: <u>Steel</u>
	Material of grout between protective casing and well casing: <u>Bentonite</u>
Screen length <u>5'</u>	Protective cap: _____
Depth of Well <u>31'</u>	Material <u>steel</u>
Filter Pack:	Vented?: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Locking?: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Material <u>filter sand</u>	Well cap: <u>Low-flow purge cap</u>
Grain Size <u>#5</u>	Material <u>Plastic</u>
Volume <u>3 cu. ft.</u>	Vented?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Seal (minimum 3 ft. length above filter pack): _____	
Material <u>Bentonite chips</u>	

D. GROUNDWATER MEASUREMENT (+0.01 foot below top of inner well casing)

Water level 4.25 Stabilization time < 1 hr
Well development method Surged and pumped to remove turbidity
Average depth of frost line 4 ft

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

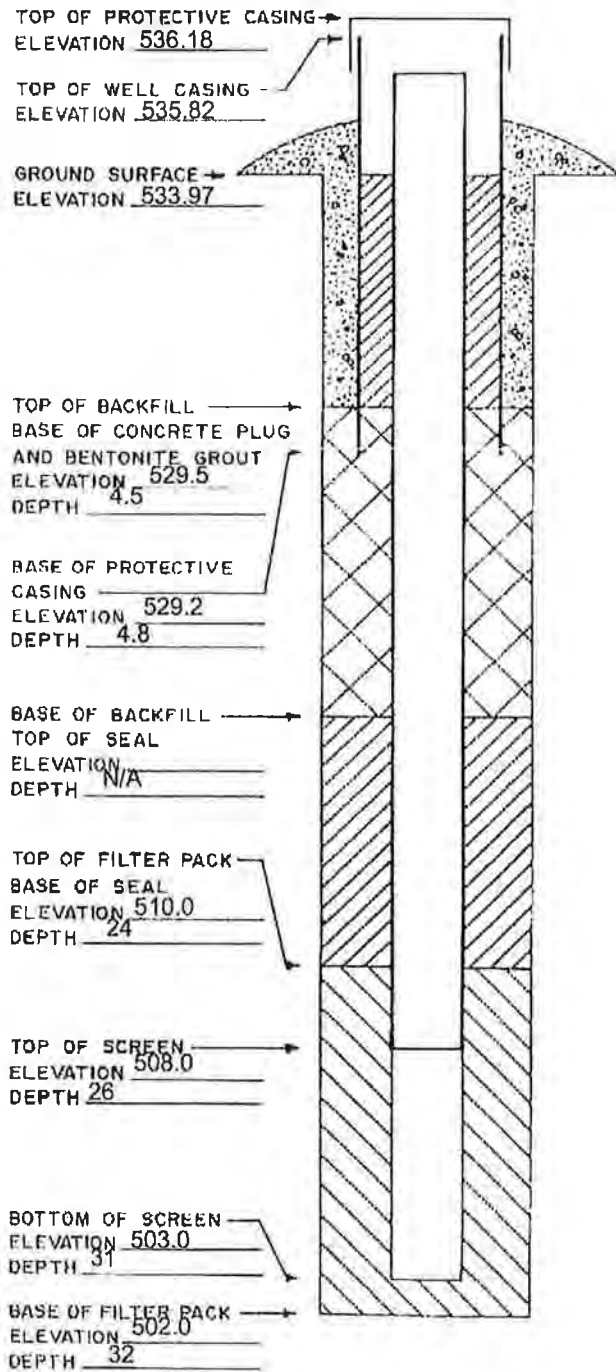
Signature  Certification # 8515 Date 8/8/2019

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2 inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov
09/2017 cmc DNR Form 542-1277

ELEVATIONS: ± 0.01 FT. MSL
 DEPTHS: ± 0.1 FT. FROM
 GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
 (SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL)



MONITORING WELL / PIEZOMETER CONSTRUCTION DOCUMENTATION FORM

Disposal Site Name Burlington Generating Station Permit No. _____
Well or Piezometer No. MW-313A Dates Started 6/23/2020 Date Completed 6/30/2020

A. SURVEYED LOCATION AND ELEVATION OF POINT (+0.5 ft.)

Specify corner of site SE Distance and direction along boundary 890 N
Distance and direction from boundary to surface monitoring well 130 E
Elevation (+0.01 ft. MSL) _____
Ground Surface 529.35' Top of protective casing 532.03'
Top of well casing 531.63' Benchmark elevation _____
Benchmark description _____

B. SOIL BORING INFORMATION

Construction Company Name Roberts Environmental Drilling
Address 1107 S Mulberry St City, State, Zip Code Millstadt, IL 62260
Name of driller Jeff Crank
Drilling method Hollow Stem Auger Drilling fluid Water Bore Hole diameter 4.25"
Soil sampling method Split spoon Depth of boring 62'

C. MONITORING WELL INSTALLATION

Casing material <u>Sch. 40 PVC</u>	Placement method <u>Pumped</u>
Length of casing <u>63.38'</u>	Volume <u>9, 50lbs bags (~150 gallons of grout)</u>
Outside casing diameter <u>2.4"</u>	Backfill (if different from seal): _____
Inside casing diameter <u>2"</u>	Material <u>3/8" Bentonite chips</u>
Casing joint type <u>Threaded</u>	Placement method <u>Poured</u>
Casing/screen joint type <u>Threaded</u>	Volume <u>3, 50lbs bags</u>
Screen material <u>Sch. 40 PVC</u>	Surface seal design: <u>Concrete</u>
Screen opening size <u>0.01</u>	Material of protective casing: <u>steel</u>
Screen length <u>5'</u>	Material of grout between protective casing and well casing: <u>Bentonite chips</u>
Depth of Well <u>61'</u>	Protective cap: _____
Filter Pack: _____	Material <u>Steel</u>
Material <u>Sand (FilterSil)</u>	Vented?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Locking?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Grain Size <u>18-23</u>	Well cap: <u>Lockable expanding well plug</u>
Volume <u>2, 50lbs bags</u>	Material <u>Plastic</u>
Seal (minimum 3 ft. length above filter pack): _____	Vented?: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N
Material <u>Bentonite grout</u>	

D. GROUNDWATER MEASUREMENT (+0.01 foot below top of inner well casing)

Water level 14.41' Stabilization time < 5 min
Well development method Surged with bailer and pumped
Average depth of frost line 4'

DRILLER'S CERTIFICATION

I certify under penalty of law I believe the information reported above is true, accurate, and complete.

Signature *Jeff Crank* Certification # 8515 Date 9-16-20

Attachments: Driller's log. Pipe schedules and grouting schedules. 8 1/2 inch x 11 inch map showing locations of all monitoring wells and piezometers.

Please mail completed form to: Iowa Department of Natural Resources, Land Quality Bureau, 502 E. 9th St, Des Moines, IA 50319.

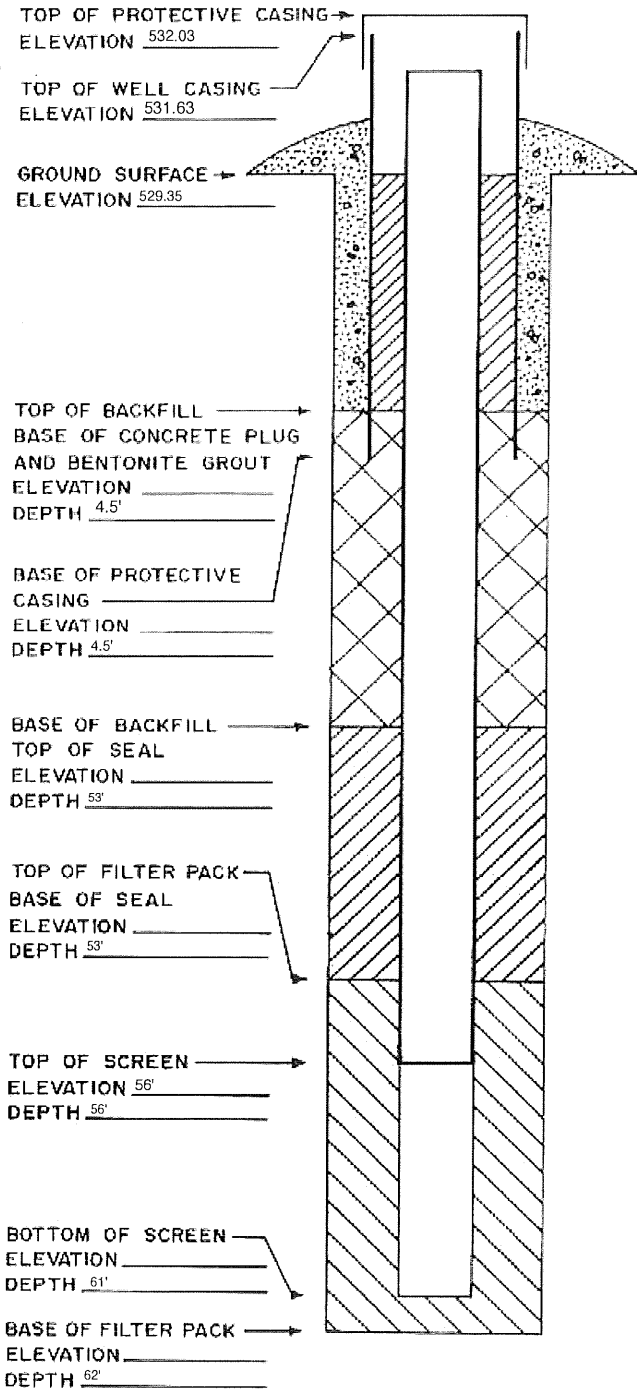
Questions? Call or Email: Nina Booker Environmental Engineer Sr., 515-725-8309, nina.booker@dnr.iowa.gov


09/2017 cmc

DNR Form 542-1277

ELEVATIONS: ± 0.01 FT. MSL
DEPTHS: ± 0.1 FT. FROM
GROUND SURFACE

SPACE TO ATTACH ENTIRE SOIL BORING LOG
(SHOW SCREENED INTERVAL AND FILTER PACK INTERVAL).





Appendix C
Analytical Laboratory Reports

C1 June 2020 Assessment Monitoring

ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-183333-1

Client Project/Site: Burlington Gen. Station 25220066

For:

SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Attn: Meghan Blodgett



*Authorized for release by:
6/15/2020 3:12:01 PM*

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

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results through
Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Job ID: 310-183333-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-183333-1

Comments

No additional comments.

Receipt

The samples were received on 6/5/2020 12:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

HPLC/IC

Method 9056A: The following samples were diluted due to the nature of the sample matrix: MW-302 (310-183333-3), MW-303 (310-183333-4), MW-304 (310-183333-5), MW-305 (310-183333-6), MW-306 (310-183333-7), MW-307 (310-183333-8) and MW-308 (310-183333-9). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 3010A: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: MW-312 (310-183333-13). The sample(s) was preserved to the appropriate pH in the laboratory.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-183333-1	Field Blank	Water	06/04/20 09:15	06/05/20 12:15	
310-183333-2	MW-301	Water	06/03/20 11:30	06/05/20 12:15	
310-183333-3	MW-302	Water	06/03/20 12:35	06/05/20 12:15	
310-183333-4	MW-303	Water	06/03/20 13:25	06/05/20 12:15	
310-183333-5	MW-304	Water	06/03/20 14:15	06/05/20 12:15	
310-183333-6	MW-305	Water	06/03/20 17:25	06/05/20 12:15	
310-183333-7	MW-306	Water	06/04/20 09:50	06/05/20 12:15	
310-183333-8	MW-307	Water	06/04/20 08:50	06/05/20 12:15	
310-183333-9	MW-308	Water	06/04/20 09:45	06/05/20 12:15	
310-183333-10	MW-309	Water	06/03/20 09:10	06/05/20 12:15	
310-183333-11	MW-310	Water	06/02/20 14:30	06/05/20 12:15	
310-183333-12	MW-311	Water	06/02/20 15:50	06/05/20 12:15	
310-183333-13	MW-312	Water	06/03/20 16:25	06/05/20 12:15	
310-183333-14	MW-313	Water	06/03/20 15:18	06/05/20 12:15	

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: Field Blank

Lab Sample ID: 310-183333-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	5.7	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: MW-301

Lab Sample ID: 310-183333-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.26	J	0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	250		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	46		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	330		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	10000		400	290	ug/L	4		6020A	Total/NA
Calcium	140		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.31	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	16		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	110		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	910		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.0	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	523.94				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	37.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.25				mg/L	1		Field Sampling	Total/NA
pH, Field	6.99				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1167				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	13.4				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	20.15				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-302

Lab Sample ID: 310-183333-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	490		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	110		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	340		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	13000		400	290	ug/L	4		6020A	Total/NA
Cadmium	0.045	J	0.10	0.039	ug/L	1		6020A	Total/NA
Calcium	210		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.21	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	55		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	140		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	1000		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	523.98				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	36.7				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.18				mg/L	1		Field Sampling	Total/NA
pH, Field	7.88				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1245				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	12.9				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	25.27				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-303

Lab Sample ID: 310-183333-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		5.0	2.0	mg/L	5		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-303 (Continued)

Lab Sample ID: 310-183333-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.27	J	0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	100		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	18		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	610		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	23000		1000	730	ug/L	10		6020A	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.56		0.50	0.091	ug/L	1		6020A	Total/NA
Lead	0.29	J	0.50	0.27	ug/L	1		6020A	Total/NA
Lithium	48		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	66		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	640		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	523.97				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	58.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.18				mg/L	1		Field Sampling	Total/NA
pH, Field	7.12				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	934				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.8				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	16.03				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-304

Lab Sample ID: 310-183333-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	250		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	35		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	220		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	6400		400	290	ug/L	4		6020A	Total/NA
Calcium	150		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.15	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	47		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	45		2.0	1.1	ug/L	1		6020A	Total/NA
Mercury	0.11	J F1	0.20	0.10	ug/L	1		7470A	Total/NA
Total Dissolved Solids	750		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.02				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	52.4				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.15				mg/L	1		Field Sampling	Total/NA
pH, Field	7.23				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1087				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.6				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	18.18				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-305

Lab Sample ID: 310-183333-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	36		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.45	J	0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	33		5.0	3.6	mg/L	5		9056A	Total/NA
Barium	230		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	2200		100	73	ug/L	1		6020A	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-305 (Continued)

Lab Sample ID: 310-183333-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.18	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	28		10	2.3	ug/L	1		6020A	Total/NA
Mercury	0.12	J	0.20	0.10	ug/L	1		7470A	Total/NA
Total Dissolved Solids	640		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.3	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.12				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	39.8				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.14				mg/L	1		Field Sampling	Total/NA
pH, Field	7.12				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	972				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	15.9				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	13.46				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-306

Lab Sample ID: 310-183333-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	120		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	1.1		1.0	0.58	ug/L	1		6020A	Total/NA
Arsenic	50		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	16		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	3200		100	73	ug/L	1		6020A	Total/NA
Calcium	41		0.50	0.19	mg/L	1		6020A	Total/NA
Lead	0.33	J	0.50	0.27	ug/L	1		6020A	Total/NA
Lithium	43		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	86		2.0	1.1	ug/L	1		6020A	Total/NA
Mercury	0.10	J	0.20	0.10	ug/L	1		7470A	Total/NA
Total Dissolved Solids	320		30	26	mg/L	1		SM 2540C	Total/NA
pH	10.3	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.45				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	59.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.16				mg/L	1		Field Sampling	Total/NA
pH, Field	10.48				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	482				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.4				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	15.96				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-307

Lab Sample ID: 310-183333-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	180		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	47		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	36		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	3600		100	73	ug/L	1		6020A	Total/NA
Cadmium	0.044	J	0.10	0.039	ug/L	1		6020A	Total/NA
Calcium	37		0.50	0.19	mg/L	1		6020A	Total/NA
Lithium	48		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	130		2.0	1.1	ug/L	1		6020A	Total/NA
Mercury	0.12	J	0.20	0.10	ug/L	1		7470A	Total/NA
Total Dissolved Solids	390		30	26	mg/L	1		SM 2540C	Total/NA
pH	10	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-307 (Continued)

Lab Sample ID: 310-183333-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ground Water Elevation	524.62				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	60.2				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.30				mg/L	1		Field Sampling	Total/NA
pH, Field	10.03				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	586				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.8				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	14.33				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-308

Lab Sample ID: 310-183333-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	58		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.37	J	0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	190		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	76		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	66		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	4700		400	290	ug/L	4		6020A	Total/NA
Cadmium	0.044	J	0.10	0.039	ug/L	1		6020A	Total/NA
Calcium	34		0.50	0.19	mg/L	1		6020A	Total/NA
Lead	0.40	J	0.50	0.27	ug/L	1		6020A	Total/NA
Lithium	48		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Total/NA
Mercury	0.13	J	0.20	0.10	ug/L	1		7470A	Total/NA
Total Dissolved Solids	470		30	26	mg/L	1		SM 2540C	Total/NA
pH	9.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.10				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	28.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.23				mg/L	1		Field Sampling	Total/NA
pH, Field	9.65				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	713				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	15.4				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	13.38				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-309

Lab Sample ID: 310-183333-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	84		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.58		0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	180		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	34		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	260		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	4400		400	290	ug/L	4		6020A	Total/NA
Calcium	82		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.57		0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	2.4	J	10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	87		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	730		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.06				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	37.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.23				mg/L	1		Field Sampling	Total/NA
pH, Field	7.09				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-309 (Continued)

Lab Sample ID: 310-183333-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance, Field	1086				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.8				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	18.88				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-310

Lab Sample ID: 310-183333-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	87		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.65		0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	100		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	55		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	550		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	500		100	73	ug/L	1		6020A	Total/NA
Calcium	130		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	2.3		0.50	0.091	ug/L	1		6020A	Total/NA
Molybdenum	5.8		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	590		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	525.36				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	38.6				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.13				mg/L	1		Field Sampling	Total/NA
pH, Field	7.30				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	881				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	12.8				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	17.82				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-311

Lab Sample ID: 310-183333-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	120		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.64		0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	220		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	19		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	300		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	2500		100	73	ug/L	1		6020A	Total/NA
Calcium	190		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.81		0.50	0.091	ug/L	1		6020A	Total/NA
Lead	1.1		0.50	0.27	ug/L	1		6020A	Total/NA
Molybdenum	11		2.0	1.1	ug/L	1		6020A	Total/NA
Mercury	0.13	J	0.20	0.10	ug/L	1		7470A	Total/NA
Total Dissolved Solids	950		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.0	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.05				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-1.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.16				mg/L	1		Field Sampling	Total/NA
pH, Field	7.10				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1464				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	12.3				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	17.95				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-312

Lab Sample ID: 310-183333-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	36		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.57		0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	200		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	22		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	190		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	6700		400	290	ug/L	4		6020A	Total/NA
Cadmium	0.095	J	0.10	0.039	ug/L	1		6020A	Total/NA
Calcium	74		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.67		0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	22		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	320		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	670		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.05				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	53.3				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.17				mg/L	1		Field Sampling	Total/NA
pH, Field	7.13				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	878				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.7				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	21.16				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-313

Lab Sample ID: 310-183333-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	83		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.52		0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	230		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	6.9		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	680		2.0	0.90	ug/L	1		6020A	Total/NA
Boron	8600		400	290	ug/L	4		6020A	Total/NA
Cadmium	0.039	J	0.10	0.039	ug/L	1		6020A	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.23	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	52		10	2.3	ug/L	1		6020A	Total/NA
Molybdenum	130		2.0	1.1	ug/L	1		6020A	Total/NA
Mercury	0.13	J	0.20	0.10	ug/L	1		7470A	Total/NA
Total Dissolved Solids	830		150	130	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	524.02				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	50.9				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.29				mg/L	1		Field Sampling	Total/NA
pH, Field	7.03				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1099				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	17.2				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	50.81				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: Field Blank

Lab Sample ID: 310-183333-1

Date Collected: 06/04/20 09:15

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		1.0	0.40	mg/L			06/10/20 20:17	1
Fluoride	<0.046		0.10	0.046	mg/L			06/10/20 20:17	1
Sulfate	<0.71		1.0	0.71	mg/L			06/10/20 20:17	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 14:55	1
Arsenic	<0.88		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 14:55	1
Barium	<0.90		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 14:55	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 14:55	1
Boron	<73		100	73	ug/L		06/08/20 08:00	06/12/20 12:47	1
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 14:55	1
Calcium	<0.19		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 14:55	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 14:55	1
Cobalt	<0.091		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 14:55	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 14:55	1
Lithium	<2.3		10	2.3	ug/L		06/08/20 08:00	06/09/20 14:55	1
Molybdenum	<1.1		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 14:55	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 14:55	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 14:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 11:53	06/08/20 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			06/11/20 13:29	1
pH	5.7	HF	0.1	0.1	SU			06/05/20 14:05	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-301

Lab Sample ID: 310-183333-2

Date Collected: 06/03/20 11:30

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		5.0	2.0	mg/L			06/10/20 21:03	5
Fluoride	0.26	J	0.50	0.23	mg/L			06/10/20 21:03	5
Sulfate	250		5.0	3.6	mg/L			06/10/20 21:03	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 14:58	1
Arsenic	46		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 14:58	1
Barium	330		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 14:58	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 14:58	1
Boron	10000		400	290	ug/L		06/08/20 08:00	06/12/20 12:50	4
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 14:58	1
Calcium	140		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 14:58	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 14:58	1
Cobalt	0.31	J	0.50	0.091	ug/L		06/08/20 08:00	06/09/20 14:58	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 14:58	1
Lithium	16		10	2.3	ug/L		06/08/20 08:00	06/09/20 14:58	1
Molybdenum	110		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 14:58	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 14:58	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 14:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 13:35	06/08/20 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	910		150	130	mg/L			06/09/20 08:07	1
pH	7.0	HF	0.1	0.1	SU			06/05/20 14:09	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	523.94				ft			06/03/20 11:30	1
Oxidation Reduction Potential	37.1				millivolts			06/03/20 11:30	1
Oxygen, Dissolved, Client Supplied	0.25				mg/L			06/03/20 11:30	1
pH, Field	6.99				SU			06/03/20 11:30	1
Specific Conductance, Field	1167				umhos/cm			06/03/20 11:30	1
Temperature, Field	13.4				Degrees C			06/03/20 11:30	1
Turbidity, Field	20.15				NTU			06/03/20 11:30	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-302

Lab Sample ID: 310-183333-3

Date Collected: 06/03/20 12:35

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		5.0	2.0	mg/L			06/10/20 21:52	5
Fluoride	<0.23		0.50	0.23	mg/L			06/10/20 21:52	5
Sulfate	490		5.0	3.6	mg/L			06/10/20 21:52	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:00	1
Arsenic	110		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:00	1
Barium	340		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:00	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:00	1
Boron	13000		400	290	ug/L		06/08/20 08:00	06/12/20 12:52	4
Cadmium	0.045 J		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:00	1
Calcium	210		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:00	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:00	1
Cobalt	0.21 J		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:00	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:00	1
Lithium	55		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:00	1
Molybdenum	140		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:00	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:00	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 13:35	06/08/20 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1000		150	130	mg/L			06/09/20 08:07	1
pH	7.6	HF	0.1	0.1	SU			06/05/20 14:10	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	523.98				ft			06/03/20 12:35	1
Oxidation Reduction Potential	36.7				millivolts			06/03/20 12:35	1
Oxygen, Dissolved, Client Supplied	0.18				mg/L			06/03/20 12:35	1
pH, Field	7.88				SU			06/03/20 12:35	1
Specific Conductance, Field	1245				umhos/cm			06/03/20 12:35	1
Temperature, Field	12.9				Degrees C			06/03/20 12:35	1
Turbidity, Field	25.27				NTU			06/03/20 12:35	1

Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-303

Lab Sample ID: 310-183333-4

Date Collected: 06/03/20 13:25

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		5.0	2.0	mg/L			06/10/20 22:09	5
Fluoride	0.27	J	0.50	0.23	mg/L			06/10/20 22:09	5
Sulfate	100		5.0	3.6	mg/L			06/10/20 22:09	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:03	1
Arsenic	18		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:03	1
Barium	610		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:03	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:03	1
Boron	23000		1000	730	ug/L		06/08/20 08:00	06/12/20 12:55	10
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:03	1
Calcium	120		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:03	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:03	1
Cobalt	0.56		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:03	1
Lead	0.29	J	0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:03	1
Lithium	48		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:03	1
Molybdenum	66		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:03	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:03	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 13:35	06/08/20 13:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	640		150	130	mg/L			06/09/20 08:07	1
pH	7.2	HF	0.1	0.1	SU			06/05/20 14:11	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	523.97				ft			06/03/20 13:25	1
Oxidation Reduction Potential	58.1				millivolts			06/03/20 13:25	1
Oxygen, Dissolved, Client Supplied	0.18				mg/L			06/03/20 13:25	1
pH, Field	7.12				SU			06/03/20 13:25	1
Specific Conductance, Field	934				umhos/cm			06/03/20 13:25	1
Temperature, Field	14.8				Degrees C			06/03/20 13:25	1
Turbidity, Field	16.03				NTU			06/03/20 13:25	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-304

Lab Sample ID: 310-183333-5

Date Collected: 06/03/20 14:15

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		5.0	2.0	mg/L			06/10/20 22:25	5
Fluoride	<0.23		0.50	0.23	mg/L			06/10/20 22:25	5
Sulfate	250		5.0	3.6	mg/L			06/10/20 22:25	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:05	1
Arsenic	35		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:05	1
Barium	220		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:05	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:05	1
Boron	6400		400	290	ug/L		06/08/20 08:00	06/12/20 12:57	4
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:05	1
Calcium	150		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:05	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:05	1
Cobalt	0.15 J		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:05	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:05	1
Lithium	47		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:05	1
Molybdenum	45		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:05	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:05	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11	J F1	0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	750		150	130	mg/L			06/09/20 08:07	1
pH	7.4	HF	0.1	0.1	SU			06/05/20 14:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.02				ft			06/03/20 14:15	1
Oxidation Reduction Potential	52.4				millivolts			06/03/20 14:15	1
Oxygen, Dissolved, Client Supplied	0.15				mg/L			06/03/20 14:15	1
pH, Field	7.23				SU			06/03/20 14:15	1
Specific Conductance, Field	1087				umhos/cm			06/03/20 14:15	1
Temperature, Field	14.6				Degrees C			06/03/20 14:15	1
Turbidity, Field	18.18				NTU			06/03/20 14:15	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-305

Lab Sample ID: 310-183333-6

Date Collected: 06/03/20 17:25

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36		5.0	2.0	mg/L			06/10/20 22:42	5
Fluoride	0.45	J	0.50	0.23	mg/L			06/10/20 22:42	5
Sulfate	33		5.0	3.6	mg/L			06/10/20 22:42	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:16	1
Arsenic	<0.88		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:16	1
Barium	230		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:16	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:16	1
Boron	2200		100	73	ug/L		06/08/20 08:00	06/12/20 13:00	1
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:16	1
Calcium	120		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:16	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:16	1
Cobalt	0.18	J	0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:16	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:16	1
Lithium	28		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:16	1
Molybdenum	<1.1		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:16	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:16	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J	0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	640		150	130	mg/L			06/09/20 08:07	1
pH	7.3	HF	0.1	0.1	SU			06/05/20 14:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.12				ft			06/03/20 17:25	1
Oxidation Reduction Potential	39.8				millivolts			06/03/20 17:25	1
Oxygen, Dissolved, Client Supplied	0.14				mg/L			06/03/20 17:25	1
pH, Field	7.12				SU			06/03/20 17:25	1
Specific Conductance, Field	972				umhos/cm			06/03/20 17:25	1
Temperature, Field	15.9				Degrees C			06/03/20 17:25	1
Turbidity, Field	13.46				NTU			06/03/20 17:25	1

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Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-306

Lab Sample ID: 310-183333-7

Date Collected: 06/04/20 09:50

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		5.0	2.0	mg/L			06/10/20 22:58	5
Fluoride	<0.23		0.50	0.23	mg/L			06/10/20 22:58	5
Sulfate	120		5.0	3.6	mg/L			06/10/20 22:58	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:18	1
Arsenic	50		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:18	1
Barium	16		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:18	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:18	1
Boron	3200		100	73	ug/L		06/08/20 08:00	06/12/20 13:02	1
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:18	1
Calcium	41		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:18	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:18	1
Cobalt	<0.091		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:18	1
Lead	0.33	J	0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:18	1
Lithium	43		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:18	1
Molybdenum	86		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:18	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:18	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	J	0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	320		30	26	mg/L			06/11/20 13:29	1
pH	10.3	HF	0.1	0.1	SU			06/05/20 14:16	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.45				ft			06/04/20 09:50	1
Oxidation Reduction Potential	59.0				millivolts			06/04/20 09:50	1
Oxygen, Dissolved, Client Supplied	0.16				mg/L			06/04/20 09:50	1
pH, Field	10.48				SU			06/04/20 09:50	1
Specific Conductance, Field	482				umhos/cm			06/04/20 09:50	1
Temperature, Field	14.4				Degrees C			06/04/20 09:50	1
Turbidity, Field	15.96				NTU			06/04/20 09:50	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-307

Lab Sample ID: 310-183333-8

Date Collected: 06/04/20 08:50

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		5.0	2.0	mg/L			06/10/20 23:15	5
Fluoride	<0.23		0.50	0.23	mg/L			06/10/20 23:15	5
Sulfate	180		5.0	3.6	mg/L			06/10/20 23:15	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:21	1
Arsenic	47		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:21	1
Barium	36		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:21	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:21	1
Boron	3600		100	73	ug/L		06/08/20 08:00	06/12/20 13:13	1
Cadmium	0.044	J	0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:21	1
Calcium	37		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:21	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:21	1
Cobalt	<0.091		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:21	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:21	1
Lithium	48		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:21	1
Molybdenum	130		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:21	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:21	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	J	0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	390		30	26	mg/L			06/11/20 13:29	1
pH	10	HF	0.1	0.1	SU			06/05/20 14:17	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.62				ft			06/04/20 08:50	1
Oxidation Reduction Potential	60.2				millivolts			06/04/20 08:50	1
Oxygen, Dissolved, Client Supplied	0.30				mg/L			06/04/20 08:50	1
pH, Field	10.03				SU			06/04/20 08:50	1
Specific Conductance, Field	586				umhos/cm			06/04/20 08:50	1
Temperature, Field	14.8				Degrees C			06/04/20 08:50	1
Turbidity, Field	14.33				NTU			06/04/20 08:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-308

Lab Sample ID: 310-183333-9

Date Collected: 06/04/20 09:45

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		5.0	2.0	mg/L			06/10/20 23:31	5
Fluoride	0.37	J	0.50	0.23	mg/L			06/10/20 23:31	5
Sulfate	190		5.0	3.6	mg/L			06/10/20 23:31	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:23	1
Arsenic	76		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:23	1
Barium	66		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:23	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:23	1
Boron	4700		400	290	ug/L		06/08/20 08:00	06/12/20 13:34	4
Cadmium	0.044	J	0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:23	1
Calcium	34		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:23	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:23	1
Cobalt	<0.091		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:23	1
Lead	0.40	J	0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:23	1
Lithium	48		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:23	1
Molybdenum	120		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:23	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:23	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	470		30	26	mg/L			06/11/20 13:29	1
pH	9.6	HF	0.1	0.1	SU			06/05/20 14:18	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.10				ft			06/04/20 09:45	1
Oxidation Reduction Potential	28.0				millivolts			06/04/20 09:45	1
Oxygen, Dissolved, Client Supplied	0.23				mg/L			06/04/20 09:45	1
pH, Field	9.65				SU			06/04/20 09:45	1
Specific Conductance, Field	713				umhos/cm			06/04/20 09:45	1
Temperature, Field	15.4				Degrees C			06/04/20 09:45	1
Turbidity, Field	13.38				NTU			06/04/20 09:45	1

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Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-309

Lab Sample ID: 310-183333-10

Date Collected: 06/03/20 09:10

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84		5.0	2.0	mg/L			06/11/20 00:20	5
Fluoride	0.58		0.50	0.23	mg/L			06/11/20 00:20	5
Sulfate	180		5.0	3.6	mg/L			06/11/20 00:20	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:26	1
Arsenic	34		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:26	1
Barium	260		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:26	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:26	1
Boron	4400		400	290	ug/L		06/08/20 08:00	06/12/20 13:36	4
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:26	1
Calcium	82		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:26	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:26	1
Cobalt	0.57		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:26	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:26	1
Lithium	2.4 J		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:26	1
Molybdenum	87		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:26	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:26	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 13:35	06/08/20 13:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	730		150	130	mg/L			06/09/20 08:07	1
pH	7.2	HF	0.1	0.1	SU			06/05/20 14:26	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.06				ft			06/03/20 09:10	1
Oxidation Reduction Potential	37.0				millivolts			06/03/20 09:10	1
Oxygen, Dissolved, Client Supplied	0.23				mg/L			06/03/20 09:10	1
pH, Field	7.09				SU			06/03/20 09:10	1
Specific Conductance, Field	1086				umhos/cm			06/03/20 09:10	1
Temperature, Field	14.8				Degrees C			06/03/20 09:10	1
Turbidity, Field	18.88				NTU			06/03/20 09:10	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-310

Lab Sample ID: 310-183333-11

Date Collected: 06/02/20 14:30

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		5.0	2.0	mg/L			06/11/20 00:36	5
Fluoride	0.65		0.50	0.23	mg/L			06/11/20 00:36	5
Sulfate	100		5.0	3.6	mg/L			06/11/20 00:36	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:31	1
Arsenic	55		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:31	1
Barium	550		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:31	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:31	1
Boron	500		100	73	ug/L		06/08/20 08:00	06/12/20 13:23	1
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:31	1
Calcium	130		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:31	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:31	1
Cobalt	2.3		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:31	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:31	1
Lithium	<2.3		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:31	1
Molybdenum	5.8		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:31	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:31	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 13:35	06/08/20 14:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	590		150	130	mg/L			06/09/20 08:07	1
pH	7.1	HF	0.1	0.1	SU			06/05/20 14:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	525.36				ft			06/02/20 14:30	1
Oxidation Reduction Potential	38.6				millivolts			06/02/20 14:30	1
Oxygen, Dissolved, Client Supplied	0.13				mg/L			06/02/20 14:30	1
pH, Field	7.30				SU			06/02/20 14:30	1
Specific Conductance, Field	881				umhos/cm			06/02/20 14:30	1
Temperature, Field	12.8				Degrees C			06/02/20 14:30	1
Turbidity, Field	17.82				NTU			06/02/20 14:30	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-311

Lab Sample ID: 310-183333-12

Date Collected: 06/02/20 15:50

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.0	2.0	mg/L			06/11/20 00:53	5
Fluoride	0.64		0.50	0.23	mg/L			06/11/20 00:53	5
Sulfate	220		5.0	3.6	mg/L			06/11/20 00:53	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:34	1
Arsenic	19		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:34	1
Barium	300		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:34	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:34	1
Boron	2500		100	73	ug/L		06/08/20 08:00	06/12/20 13:26	1
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:34	1
Calcium	190		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:34	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:34	1
Cobalt	0.81		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:34	1
Lead	1.1		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:34	1
Lithium	<2.3		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:34	1
Molybdenum	11		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:34	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:34	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	950		150	130	mg/L			06/09/20 08:07	1
pH	7.0	HF	0.1	0.1	SU			06/05/20 14:31	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.05				ft			06/02/20 15:50	1
Oxidation Reduction Potential	-1.1				millivolts			06/02/20 15:50	1
Oxygen, Dissolved, Client Supplied	0.16				mg/L			06/02/20 15:50	1
pH, Field	7.10				SU			06/02/20 15:50	1
Specific Conductance, Field	1464				umhos/cm			06/02/20 15:50	1
Temperature, Field	12.3				Degrees C			06/02/20 15:50	1
Turbidity, Field	17.95				NTU			06/02/20 15:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-312
 Date Collected: 06/03/20 16:25
 Date Received: 06/05/20 12:15

Lab Sample ID: 310-183333-13
 Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36		5.0	2.0	mg/L			06/11/20 01:09	5
Fluoride	0.57		0.50	0.23	mg/L			06/11/20 01:09	5
Sulfate	200		5.0	3.6	mg/L			06/11/20 01:09	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:36	1
Arsenic	22		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:36	1
Barium	190		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:36	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:36	1
Boron	6700		400	290	ug/L		06/08/20 08:00	06/12/20 13:29	4
Cadmium	0.095 J		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:36	1
Calcium	74		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:36	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:36	1
Cobalt	0.67		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:36	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:36	1
Lithium	22		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:36	1
Molybdenum	320		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:36	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:36	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/09/20 11:09	06/10/20 14:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	670		150	130	mg/L			06/09/20 08:07	1
pH	7.1	HF	0.1	0.1	SU			06/05/20 14:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.05				ft			06/03/20 16:25	1
Oxidation Reduction Potential	53.3				millivolts			06/03/20 16:25	1
Oxygen, Dissolved, Client Supplied	0.17				mg/L			06/03/20 16:25	1
pH, Field	7.13				SU			06/03/20 16:25	1
Specific Conductance, Field	878				umhos/cm			06/03/20 16:25	1
Temperature, Field	14.7				Degrees C			06/03/20 16:25	1
Turbidity, Field	21.16				NTU			06/03/20 16:25	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-313

Lab Sample ID: 310-183333-14

Date Collected: 06/03/20 15:18

Matrix: Water

Date Received: 06/05/20 12:15

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83		5.0	2.0	mg/L			06/11/20 01:26	5
Fluoride	0.52		0.50	0.23	mg/L			06/11/20 01:26	5
Sulfate	230		5.0	3.6	mg/L			06/11/20 01:26	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 15:39	1
Arsenic	6.9		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 15:39	1
Barium	680		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 15:39	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 15:39	1
Boron	8600		400	290	ug/L		06/08/20 08:00	06/12/20 13:31	4
Cadmium	0.039	J	0.10	0.039	ug/L		06/08/20 08:00	06/09/20 15:39	1
Calcium	120		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 15:39	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:39	1
Cobalt	0.23	J	0.50	0.091	ug/L		06/08/20 08:00	06/09/20 15:39	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 15:39	1
Lithium	52		10	2.3	ug/L		06/08/20 08:00	06/09/20 15:39	1
Molybdenum	130		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 15:39	1
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 15:39	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 15:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13	J	0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	830		150	130	mg/L			06/09/20 08:07	1
pH	7.1	HF	0.1	0.1	SU			06/05/20 14:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	524.02				ft			06/03/20 15:18	1
Oxidation Reduction Potential	50.9				millivolts			06/03/20 15:18	1
Oxygen, Dissolved, Client Supplied	0.29				mg/L			06/03/20 15:18	1
pH, Field	7.03				SU			06/03/20 15:18	1
Specific Conductance, Field	1099				umhos/cm			06/03/20 15:18	1
Temperature, Field	17.2				Degrees C			06/03/20 15:18	1
Turbidity, Field	50.81				NTU			06/03/20 15:18	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-281817/3
Matrix: Water
Analysis Batch: 281817

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		1.0	0.40	mg/L			06/10/20 19:45	1
Fluoride	<0.046		0.10	0.046	mg/L			06/10/20 19:45	1
Sulfate	<0.71		1.0	0.71	mg/L			06/10/20 19:45	1

Lab Sample ID: LCS 310-281817/4
Matrix: Water
Analysis Batch: 281817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.2		mg/L		102	90 - 110
Fluoride	2.00	1.99		mg/L		100	90 - 110
Sulfate	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: 310-183333-2 MS
Matrix: Water
Analysis Batch: 281817

Client Sample ID: MW-301
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	22		25.0	46.0		mg/L		96	80 - 120
Fluoride	0.26	J	5.00	5.51		mg/L		105	80 - 120
Sulfate	250		25.0	269	4	mg/L		79	80 - 120

Lab Sample ID: 310-183333-2 MSD
Matrix: Water
Analysis Batch: 281817

Client Sample ID: MW-301
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	22		25.0	45.7		mg/L		95	80 - 120	1	15
Fluoride	0.26	J	5.00	5.37		mg/L		102	80 - 120	3	15
Sulfate	250		25.0	268	4	mg/L		76	80 - 120	0	15

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 310-281262/1-A
Matrix: Water
Analysis Batch: 281593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.58		1.0	0.58	ug/L		06/08/20 08:00	06/09/20 14:32	1
Arsenic	<0.88		2.0	0.88	ug/L		06/08/20 08:00	06/09/20 14:32	1
Barium	<0.90		2.0	0.90	ug/L		06/08/20 08:00	06/09/20 14:32	1
Beryllium	<0.27		1.0	0.27	ug/L		06/08/20 08:00	06/09/20 14:32	1
Boron	<73		100	73	ug/L		06/08/20 08:00	06/09/20 14:32	1
Cadmium	<0.039		0.10	0.039	ug/L		06/08/20 08:00	06/09/20 14:32	1
Calcium	<0.19		0.50	0.19	mg/L		06/08/20 08:00	06/09/20 14:32	1
Chromium	<1.1		5.0	1.1	ug/L		06/08/20 08:00	06/09/20 14:32	1
Cobalt	<0.091		0.50	0.091	ug/L		06/08/20 08:00	06/09/20 14:32	1
Lead	<0.27		0.50	0.27	ug/L		06/08/20 08:00	06/09/20 14:32	1
Lithium	<2.3		10	2.3	ug/L		06/08/20 08:00	06/09/20 14:32	1
Molybdenum	<1.1		2.0	1.1	ug/L		06/08/20 08:00	06/09/20 14:32	1

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QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 310-281262/1-A
Matrix: Water
Analysis Batch: 281593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<1.0		5.0	1.0	ug/L		06/08/20 08:00	06/09/20 14:32	1
Thallium	<0.26		1.0	0.26	ug/L		06/08/20 08:00	06/09/20 14:32	1

Lab Sample ID: LCS 310-281262/2-A
Matrix: Water
Analysis Batch: 281593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	40.0	35.8		ug/L		90	80 - 120
Arsenic	80.0	71.1		ug/L		89	80 - 120
Barium	80.0	84.0		ug/L		105	80 - 120
Beryllium	40.0	41.3		ug/L		103	80 - 120
Boron	1760	1750		ug/L		99	80 - 120
Cadmium	40.0	42.3		ug/L		106	80 - 120
Calcium	4.00	4.22		mg/L		106	80 - 120
Chromium	80.0	83.0		ug/L		104	80 - 120
Cobalt	40.0	40.9		ug/L		102	80 - 120
Lead	40.0	42.1		ug/L		105	80 - 120
Lithium	200	194		ug/L		97	80 - 120
Molybdenum	80.0	75.9		ug/L		95	80 - 120
Selenium	80.0	75.2		ug/L		94	80 - 120
Thallium	32.0	32.1		ug/L		100	80 - 120

Lab Sample ID: 310-183333-10 DU
Matrix: Water
Analysis Batch: 281593

Client Sample ID: MW-309
Prep Type: Total/NA
Prep Batch: 281262

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.58		<0.58		ug/L		NC	20
Arsenic	34		32.9		ug/L		2	20
Barium	260		252		ug/L		3	20
Beryllium	<0.27		<0.27		ug/L		NC	20
Cadmium	<0.039		<0.039		ug/L		NC	20
Calcium	82		80.9		mg/L		2	20
Chromium	<1.1		<1.1		ug/L		NC	20
Cobalt	0.57		0.554		ug/L		2	20
Lead	<0.27		<0.27		ug/L		NC	20
Lithium	2.4 J		2.85 J		ug/L		18	20
Molybdenum	87		85.3		ug/L		2	20
Selenium	<1.0		<1.0		ug/L		NC	20
Thallium	<0.26		<0.26		ug/L		NC	20

Lab Sample ID: 310-183333-10 DU
Matrix: Water
Analysis Batch: 282062

Client Sample ID: MW-309
Prep Type: Total/NA
Prep Batch: 281262

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Boron	4400		4260		ug/L		3	20

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QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-281216/1-A
Matrix: Water
Analysis Batch: 281414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 11:53	06/08/20 12:57	1

Lab Sample ID: LCS 310-281216/2-A
Matrix: Water
Analysis Batch: 281414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281216
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	1.67	1.53		ug/L		92	80 - 120

Lab Sample ID: MB 310-281235/1-A
Matrix: Water
Analysis Batch: 281414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/05/20 13:47	06/08/20 14:03	1

Lab Sample ID: LCS 310-281235/2-A
Matrix: Water
Analysis Batch: 281414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281235
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	1.67	1.49		ug/L		90	80 - 120

Lab Sample ID: 310-183333-5 MS
Matrix: Water
Analysis Batch: 281414

Client Sample ID: MW-304
Prep Type: Total/NA
Prep Batch: 281235
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	0.11	J F1	1.67	1.39	F1	ug/L		77	80 - 120

Lab Sample ID: 310-183333-5 MSD
Matrix: Water
Analysis Batch: 281414

Client Sample ID: MW-304
Prep Type: Total/NA
Prep Batch: 281235
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.11	J F1	1.67	1.40	F1	ug/L		77	80 - 120	1	20

Lab Sample ID: MB 310-281513/1-A
Matrix: Water
Analysis Batch: 281684

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		06/09/20 11:09	06/10/20 14:34	1

Lab Sample ID: LCS 310-281513/2-A
Matrix: Water
Analysis Batch: 281684

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281513
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	1.67	1.51		ug/L		91	80 - 120

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QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-281482/1
 Matrix: Water
 Analysis Batch: 281482

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			06/09/20 08:07	1

Lab Sample ID: LCS 310-281482/2
 Matrix: Water
 Analysis Batch: 281482

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	994		mg/L		99	90 - 110

Lab Sample ID: 310-183333-3 DU
 Matrix: Water
 Analysis Batch: 281482

Client Sample ID: MW-302
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1000		990		mg/L		4	24

Lab Sample ID: MB 310-281805/1
 Matrix: Water
 Analysis Batch: 281805

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			06/11/20 13:29	1

Lab Sample ID: LCS 310-281805/2
 Matrix: Water
 Analysis Batch: 281805

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1020		mg/L		102	90 - 110

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-281237/1
 Matrix: Water
 Analysis Batch: 281237

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		99	98 - 102

Lab Sample ID: 310-183333-1 DU
 Matrix: Water
 Analysis Batch: 281237

Client Sample ID: Field Blank
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	5.7	HF	5.7		SU		0.5	20

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QC Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 310-183333-10 DU
Matrix: Water
Analysis Batch: 281237

Client Sample ID: MW-309
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.2	HF	7.1		SU		1	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

HPLC/IC

Analysis Batch: 281817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	9056A	
310-183333-2	MW-301	Total/NA	Water	9056A	
310-183333-3	MW-302	Total/NA	Water	9056A	
310-183333-4	MW-303	Total/NA	Water	9056A	
310-183333-5	MW-304	Total/NA	Water	9056A	
310-183333-6	MW-305	Total/NA	Water	9056A	
310-183333-7	MW-306	Total/NA	Water	9056A	
310-183333-8	MW-307	Total/NA	Water	9056A	
310-183333-9	MW-308	Total/NA	Water	9056A	
310-183333-10	MW-309	Total/NA	Water	9056A	
310-183333-11	MW-310	Total/NA	Water	9056A	
310-183333-12	MW-311	Total/NA	Water	9056A	
310-183333-13	MW-312	Total/NA	Water	9056A	
310-183333-14	MW-313	Total/NA	Water	9056A	
MB 310-281817/3	Method Blank	Total/NA	Water	9056A	
LCS 310-281817/4	Lab Control Sample	Total/NA	Water	9056A	
310-183333-2 MS	MW-301	Total/NA	Water	9056A	
310-183333-2 MSD	MW-301	Total/NA	Water	9056A	

Metals

Prep Batch: 281216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	7470A	
310-183333-2	MW-301	Total/NA	Water	7470A	
310-183333-3	MW-302	Total/NA	Water	7470A	
310-183333-4	MW-303	Total/NA	Water	7470A	
310-183333-10	MW-309	Total/NA	Water	7470A	
310-183333-11	MW-310	Total/NA	Water	7470A	
MB 310-281216/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-281216/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 281235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-5	MW-304	Total/NA	Water	7470A	
310-183333-6	MW-305	Total/NA	Water	7470A	
310-183333-7	MW-306	Total/NA	Water	7470A	
310-183333-8	MW-307	Total/NA	Water	7470A	
310-183333-9	MW-308	Total/NA	Water	7470A	
310-183333-12	MW-311	Total/NA	Water	7470A	
310-183333-14	MW-313	Total/NA	Water	7470A	
MB 310-281235/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-281235/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-183333-5 MS	MW-304	Total/NA	Water	7470A	
310-183333-5 MSD	MW-304	Total/NA	Water	7470A	

Prep Batch: 281262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	3010A	
310-183333-2	MW-301	Total/NA	Water	3010A	
310-183333-3	MW-302	Total/NA	Water	3010A	

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QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Metals (Continued)

Prep Batch: 281262 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-4	MW-303	Total/NA	Water	3010A	
310-183333-5	MW-304	Total/NA	Water	3010A	
310-183333-6	MW-305	Total/NA	Water	3010A	
310-183333-7	MW-306	Total/NA	Water	3010A	
310-183333-8	MW-307	Total/NA	Water	3010A	
310-183333-9	MW-308	Total/NA	Water	3010A	
310-183333-10	MW-309	Total/NA	Water	3010A	
310-183333-11	MW-310	Total/NA	Water	3010A	
310-183333-12	MW-311	Total/NA	Water	3010A	
310-183333-13	MW-312	Total/NA	Water	3010A	
310-183333-14	MW-313	Total/NA	Water	3010A	
MB 310-281262/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-281262/2-A	Lab Control Sample	Total/NA	Water	3010A	
310-183333-10 DU	MW-309	Total/NA	Water	3010A	

Analysis Batch: 281414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	7470A	281216
310-183333-2	MW-301	Total/NA	Water	7470A	281216
310-183333-3	MW-302	Total/NA	Water	7470A	281216
310-183333-4	MW-303	Total/NA	Water	7470A	281216
310-183333-5	MW-304	Total/NA	Water	7470A	281235
310-183333-6	MW-305	Total/NA	Water	7470A	281235
310-183333-7	MW-306	Total/NA	Water	7470A	281235
310-183333-8	MW-307	Total/NA	Water	7470A	281235
310-183333-9	MW-308	Total/NA	Water	7470A	281235
310-183333-10	MW-309	Total/NA	Water	7470A	281216
310-183333-11	MW-310	Total/NA	Water	7470A	281216
310-183333-12	MW-311	Total/NA	Water	7470A	281235
310-183333-14	MW-313	Total/NA	Water	7470A	281235
MB 310-281216/1-A	Method Blank	Total/NA	Water	7470A	281216
MB 310-281235/1-A	Method Blank	Total/NA	Water	7470A	281235
LCS 310-281216/2-A	Lab Control Sample	Total/NA	Water	7470A	281216
LCS 310-281235/2-A	Lab Control Sample	Total/NA	Water	7470A	281235
310-183333-5 MS	MW-304	Total/NA	Water	7470A	281235
310-183333-5 MSD	MW-304	Total/NA	Water	7470A	281235

Prep Batch: 281513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-13	MW-312	Total/NA	Water	7470A	
MB 310-281513/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-281513/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 281593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	6020A	281262
310-183333-2	MW-301	Total/NA	Water	6020A	281262
310-183333-3	MW-302	Total/NA	Water	6020A	281262
310-183333-4	MW-303	Total/NA	Water	6020A	281262
310-183333-5	MW-304	Total/NA	Water	6020A	281262
310-183333-6	MW-305	Total/NA	Water	6020A	281262

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QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Metals (Continued)

Analysis Batch: 281593 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-7	MW-306	Total/NA	Water	6020A	281262
310-183333-8	MW-307	Total/NA	Water	6020A	281262
310-183333-9	MW-308	Total/NA	Water	6020A	281262
310-183333-10	MW-309	Total/NA	Water	6020A	281262
310-183333-11	MW-310	Total/NA	Water	6020A	281262
310-183333-12	MW-311	Total/NA	Water	6020A	281262
310-183333-13	MW-312	Total/NA	Water	6020A	281262
310-183333-14	MW-313	Total/NA	Water	6020A	281262
MB 310-281262/1-A	Method Blank	Total/NA	Water	6020A	281262
LCS 310-281262/2-A	Lab Control Sample	Total/NA	Water	6020A	281262
310-183333-10 DU	MW-309	Total/NA	Water	6020A	281262

Analysis Batch: 281684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-13	MW-312	Total/NA	Water	7470A	281513
MB 310-281513/1-A	Method Blank	Total/NA	Water	7470A	281513
LCS 310-281513/2-A	Lab Control Sample	Total/NA	Water	7470A	281513

Analysis Batch: 282062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	6020A	281262
310-183333-2	MW-301	Total/NA	Water	6020A	281262
310-183333-3	MW-302	Total/NA	Water	6020A	281262
310-183333-4	MW-303	Total/NA	Water	6020A	281262
310-183333-5	MW-304	Total/NA	Water	6020A	281262
310-183333-6	MW-305	Total/NA	Water	6020A	281262
310-183333-7	MW-306	Total/NA	Water	6020A	281262
310-183333-8	MW-307	Total/NA	Water	6020A	281262
310-183333-9	MW-308	Total/NA	Water	6020A	281262
310-183333-10	MW-309	Total/NA	Water	6020A	281262
310-183333-11	MW-310	Total/NA	Water	6020A	281262
310-183333-12	MW-311	Total/NA	Water	6020A	281262
310-183333-13	MW-312	Total/NA	Water	6020A	281262
310-183333-14	MW-313	Total/NA	Water	6020A	281262
310-183333-10 DU	MW-309	Total/NA	Water	6020A	281262

General Chemistry

Analysis Batch: 281237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	SM 4500 H+ B	
310-183333-2	MW-301	Total/NA	Water	SM 4500 H+ B	
310-183333-3	MW-302	Total/NA	Water	SM 4500 H+ B	
310-183333-4	MW-303	Total/NA	Water	SM 4500 H+ B	
310-183333-5	MW-304	Total/NA	Water	SM 4500 H+ B	
310-183333-6	MW-305	Total/NA	Water	SM 4500 H+ B	
310-183333-7	MW-306	Total/NA	Water	SM 4500 H+ B	
310-183333-8	MW-307	Total/NA	Water	SM 4500 H+ B	
310-183333-9	MW-308	Total/NA	Water	SM 4500 H+ B	
310-183333-10	MW-309	Total/NA	Water	SM 4500 H+ B	
310-183333-11	MW-310	Total/NA	Water	SM 4500 H+ B	

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QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

General Chemistry (Continued)

Analysis Batch: 281237 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-12	MW-311	Total/NA	Water	SM 4500 H+ B	
310-183333-13	MW-312	Total/NA	Water	SM 4500 H+ B	
310-183333-14	MW-313	Total/NA	Water	SM 4500 H+ B	
LCS 310-281237/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-183333-1 DU	Field Blank	Total/NA	Water	SM 4500 H+ B	
310-183333-10 DU	MW-309	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 281482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-2	MW-301	Total/NA	Water	SM 2540C	
310-183333-3	MW-302	Total/NA	Water	SM 2540C	
310-183333-4	MW-303	Total/NA	Water	SM 2540C	
310-183333-5	MW-304	Total/NA	Water	SM 2540C	
310-183333-6	MW-305	Total/NA	Water	SM 2540C	
310-183333-10	MW-309	Total/NA	Water	SM 2540C	
310-183333-11	MW-310	Total/NA	Water	SM 2540C	
310-183333-12	MW-311	Total/NA	Water	SM 2540C	
310-183333-13	MW-312	Total/NA	Water	SM 2540C	
310-183333-14	MW-313	Total/NA	Water	SM 2540C	
MB 310-281482/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-281482/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-183333-3 DU	MW-302	Total/NA	Water	SM 2540C	

Analysis Batch: 281805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	SM 2540C	
310-183333-7	MW-306	Total/NA	Water	SM 2540C	
310-183333-8	MW-307	Total/NA	Water	SM 2540C	
310-183333-9	MW-308	Total/NA	Water	SM 2540C	
MB 310-281805/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-281805/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 281674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-2	MW-301	Total/NA	Water	Field Sampling	
310-183333-3	MW-302	Total/NA	Water	Field Sampling	
310-183333-4	MW-303	Total/NA	Water	Field Sampling	
310-183333-5	MW-304	Total/NA	Water	Field Sampling	
310-183333-6	MW-305	Total/NA	Water	Field Sampling	
310-183333-7	MW-306	Total/NA	Water	Field Sampling	
310-183333-8	MW-307	Total/NA	Water	Field Sampling	
310-183333-9	MW-308	Total/NA	Water	Field Sampling	
310-183333-10	MW-309	Total/NA	Water	Field Sampling	
310-183333-11	MW-310	Total/NA	Water	Field Sampling	
310-183333-12	MW-311	Total/NA	Water	Field Sampling	
310-183333-13	MW-312	Total/NA	Water	Field Sampling	
310-183333-14	MW-313	Total/NA	Water	Field Sampling	

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Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: Field Blank

Lab Sample ID: 310-183333-1

Date Collected: 06/04/20 09:15

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	281817	06/10/20 20:17	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 14:55	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	282062	06/12/20 12:47	ACJ	TAL CF
Total/NA	Prep	7470A			281216	06/05/20 11:53	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 13:44	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281805	06/11/20 13:29	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:05	ARG	TAL CF

Client Sample ID: MW-301

Lab Sample ID: 310-183333-2

Date Collected: 06/03/20 11:30

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 21:03	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 14:58	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		4	282062	06/12/20 12:50	ACJ	TAL CF
Total/NA	Prep	7470A			281216	06/05/20 13:35	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 13:46	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:09	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 11:30	ANO	TAL CF

Client Sample ID: MW-302

Lab Sample ID: 310-183333-3

Date Collected: 06/03/20 12:35

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 21:52	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:00	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		4	282062	06/12/20 12:52	ACJ	TAL CF
Total/NA	Prep	7470A			281216	06/05/20 13:35	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 13:48	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:10	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 12:35	ANO	TAL CF

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Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-303

Lab Sample ID: 310-183333-4

Date Collected: 06/03/20 13:25

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 22:09	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:03	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		10	282062	06/12/20 12:55	ACJ	TAL CF
Total/NA	Prep	7470A			281216	06/05/20 13:35	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 13:50	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:11	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 13:25	ANO	TAL CF

Client Sample ID: MW-304

Lab Sample ID: 310-183333-5

Date Collected: 06/03/20 14:15

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 22:25	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:05	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		4	282062	06/12/20 12:57	ACJ	TAL CF
Total/NA	Prep	7470A			281235	06/05/20 13:47	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:10	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:13	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 14:15	ANO	TAL CF

Client Sample ID: MW-305

Lab Sample ID: 310-183333-6

Date Collected: 06/03/20 17:25

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 22:42	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:16	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	282062	06/12/20 13:00	ACJ	TAL CF
Total/NA	Prep	7470A			281235	06/05/20 13:47	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:16	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:14	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 17:25	ANO	TAL CF

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Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-306

Lab Sample ID: 310-183333-7

Date Collected: 06/04/20 09:50

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 22:58	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:18	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	282062	06/12/20 13:02	ACJ	TAL CF
Total/NA	Prep	7470A			281235	06/05/20 13:47	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:18	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281805	06/11/20 13:29	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:16	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/04/20 09:50	ANO	TAL CF

Client Sample ID: MW-307

Lab Sample ID: 310-183333-8

Date Collected: 06/04/20 08:50

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 23:15	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:21	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	282062	06/12/20 13:13	ACJ	TAL CF
Total/NA	Prep	7470A			281235	06/05/20 13:47	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:20	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281805	06/11/20 13:29	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:17	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/04/20 08:50	ANO	TAL CF

Client Sample ID: MW-308

Lab Sample ID: 310-183333-9

Date Collected: 06/04/20 09:45

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/10/20 23:31	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:23	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		4	282062	06/12/20 13:34	ACJ	TAL CF
Total/NA	Prep	7470A			281235	06/05/20 13:47	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:27	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281805	06/11/20 13:29	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:18	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/04/20 09:45	ANO	TAL CF

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Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-309

Lab Sample ID: 310-183333-10

Date Collected: 06/03/20 09:10

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/11/20 00:20	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:26	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		4	282062	06/12/20 13:36	ACJ	TAL CF
Total/NA	Prep	7470A			281216	06/05/20 13:35	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 13:59	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:26	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 09:10	ANO	TAL CF

Client Sample ID: MW-310

Lab Sample ID: 310-183333-11

Date Collected: 06/02/20 14:30

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/11/20 00:36	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:31	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	282062	06/12/20 13:23	ACJ	TAL CF
Total/NA	Prep	7470A			281216	06/05/20 13:35	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:01	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:30	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/02/20 14:30	ANO	TAL CF

Client Sample ID: MW-311

Lab Sample ID: 310-183333-12

Date Collected: 06/02/20 15:50

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/11/20 00:53	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:34	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	282062	06/12/20 13:26	ACJ	TAL CF
Total/NA	Prep	7470A			281235	06/05/20 13:47	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:29	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:31	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/02/20 15:50	ANO	TAL CF

Eurofins TestAmerica, Cedar Falls

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Client Sample ID: MW-312

Lab Sample ID: 310-183333-13

Date Collected: 06/03/20 16:25

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/11/20 01:09	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:36	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		4	282062	06/12/20 13:29	ACJ	TAL CF
Total/NA	Prep	7470A			281513	06/09/20 11:09	HIS	TAL CF
Total/NA	Analysis	7470A		1	281684	06/10/20 14:38	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:32	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 16:25	ANO	TAL CF

Client Sample ID: MW-313

Lab Sample ID: 310-183333-14

Date Collected: 06/03/20 15:18

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	281817	06/11/20 01:26	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		1	281593	06/09/20 15:39	ACJ	TAL CF
Total/NA	Prep	3010A			281262	06/08/20 08:00	HED	TAL CF
Total/NA	Analysis	6020A		4	282062	06/12/20 13:31	ACJ	TAL CF
Total/NA	Prep	7470A			281235	06/05/20 13:47	HIS	TAL CF
Total/NA	Analysis	7470A		1	281414	06/08/20 14:31	HIS	TAL CF
Total/NA	Analysis	SM 2540C		1	281482	06/09/20 08:07	LBB	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	281237	06/05/20 14:34	ARG	TAL CF
Total/NA	Analysis	Field Sampling		1	281674	06/03/20 15:18	ANO	TAL CF

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Laboratory: Eurofins TestAmerica, Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-21

1

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Method Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	TAL CF
6020A	Metals (ICP/MS)	SW846	TAL CF
7470A	Mercury (CVAA)	SW846	TAL CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CF
SM 4500 H+ B	pH	SM	TAL CF
Field Sampling	Field Sampling	EPA	TAL CF
3010A	Preparation, Total Metals	SW846	TAL CF
7470A	Preparation, Mercury	SW846	TAL CF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Eurofins TestAmerica, Cedar Falls



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS Engineers</u>			
City/State: <small>CITY</small> <u>Clive</u>	<small>STATE</small> <u>IA</u>	Project: <u>Burlington Gen Station</u>	
Receipt Information			
Date/Time Received: <small>DATE</small> <u>6/5/20</u> <small>TIME</small> <u>0935</u>	Received By: <u>EAM</u>		
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>3</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>0</u>	Correction Factor (°C): <u>+0.1</u>		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>+3.2</u>	Corrected Temp (°C): <u>+3.3</u>		
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Client Information		Sampler: Michael Kraut		Lab PM: Fredrick, Sandie		Carrier Tracking No(s):		COC No: 310-49932-14654-1				
Client Contact: Louise Jennings		Phone: 262-518-4085		E-Mail: sandie.fredrick@testamericainc.com				Page: Page 1 of 3				
Company: SCS Engineers		Due Date Requested:		Analysis Requested				Job #:				
Address: 8450 Hickman Road Suite 20		TAT Requested (days):						Preservation Codes:				
City: Clive								A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:				
State, Zip: IA, 50325		PO #		25220066				M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)				
Phone:		WO #										
Email: ljennings@scsengineers.com		Project #		31011020								
Project Name: Burlington Gen. Station 25220066		SSOW#										
Site:												
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewat, BT=BIOSUR, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A - Metals - Hg	2540C, Calc'd, 9056A, ORGM, 28D, SM4500, H+	903.0 - Radium 226	904.0 - Radium 228	Total Number of containers	Special Instructions/Note:
Field Blank	6/4/20	9:15	G	Water	N	N						
MW-301	6/3/20	11:30	G	Water	N	N						
MW-302	6/3/20	12:35	G	Water	N	N						
MW-303	6/3/20	13:25	G	Water	N	N						
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:												
Empty Kit Relinquished by: [Signature] Relinquished by: [Signature] Date/Time: 6/4/20 1630 Company: SCS Relinquished by: [Signature] Date/Time: [Signature] Company: [Signature] Relinquished by: [Signature] Date/Time: [Signature] Company: [Signature]												
Cooler Temperature(s) °C and Other Remarks:												



Chain of Custody Record

Client Information		Sampler: Michael Kraut		Lab PM: Fredrick, Sandie		Carrier Tracking No(s):		COC No: 310-49932-14654.1					
Client Contact: Louise Jennings		Phone: 262-518-4085		E-Mail: Sandie.fredrick@testamericainc.com				Page: Page 2 of 3					
Company: SCS Engineers		Due Date Requested:		Analysis Requested				Job #:					
Address: 8450 Hickman Road Suite 20		TAT Requested (days):						Preservation Codes:					
City: Clive								M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)					
State, Zip: IA, 50325		PO #: 25220066						Other:					
Phone:		WO #:											
Email: ljennings@scsengineers.com		Project #:											
Project Name: Burlington Gen. Station 25220066		SSOW#:											
Site:													
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, D=wastewat, BT=issue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A - Metals - Hg	2540C Calcd, 9056A_ORGM_28D, SM4500_H+	903.0 - Radium 226	904.0 - Radium 228	Total Number of containers	Special Instructions/Note:	
MW-304	6/3/20	14:15	G	Water	N								
MW-305	6/3/20	17:25	G	Water	N								
MW-306	6/4/20	9:50	G	Water	N								
MW-307	6/4/20	8:50	G	Water	N								
MW-308	6/3/20	9:45	G	Water	N								
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)													
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months													
Special Instructions/QC Requirements:													
Relinquished by:		Date/Time: 6/4/20 1630		Company: SCS		Received by:		Date/Time: 6/5/20 0935		Company: SCS		Method of Shipment:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		Cooler Temperature(s) °C and Other Remarks	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		Custody Seal No.:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		Custody Seals Intact: Δ Yes Δ No	



Client Information		Sampler: Michael Kraut		Lab PM: Fredrick, Sandie		Carrier Tracking No(s):		COC No: 310-49932-14654.1	
Client Contact: Louise Jennings		Phone: 262-518-4085		E-Mail: sandie.fredrick@testamericainc.com				Page 3 of 3	
Company: SCS Engineers		Due Date Requested:		Analysis Requested				Job #:	
Address: 8450 Hickman Road Suite 20		TAT Requested (days):		6020A - Metals - Hg		Total Number of Containers		Preservation Codes:	
City: Clive				Perform MS/MSD (Yes or No)				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
State, Zip: IA, 50325		PO #: 25220066		Field Filtered Sample (Yes or No)				M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
Phone:		WO #:		904.0 - Radium 228				Special Instructions/Note:	
Email: ljennings@scsengineers.com		Project #: 31011020		903.0 - Radium 226					
Project Name: Burlington Gen. Station 25220066		SSOW#:		2540C, Calcd, 9056A, ORGM, 28D, SM4500, H+					
Site:				6020A - Metals - Hg					
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	904.0 - Radium 228	903.0 - Radium 226	6020A - Metals - Hg
MW-309	6/3/20	9:10	G	Water	N	N			
MW-310	6/2/20	14:30	G	Water	N	N			
MW-311	6/2/20	15:50	G	Water	N	N			
MW-312	6/3/20	16:25	G	Water	N	N			
MW-313	6/3/20	15:18	G	Water	N	N			
<p>Possible Hazard Identification</p> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) <p>Empty, Kettle Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____</p> <p>Relinquished by: _____ Date/Time: 6/4/20 1630 Company: SCS</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p> <p>Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Custody Seal No. _____ Cooler Temperature(s) °C and Other Remarks: _____</p>									



**Table 1. Sampling Points and Parameters - CCR Rule Sampling Program Assessment Monitoring
Groundwater Monitoring - Burlington Generating Station / SCS Engineers Project #25216066**

	Parameter	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307	MW-308	MW-309	MW-310	MW-311	MW-312	MW-313	Field Blank	TOTAL
Appendix III Parameters	Boron	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Calcium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Chloride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Fluoride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	pH	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Sulfate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	TDS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
Appendix IV Parameters	Antimony	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Arsenic	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Barium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Beryllium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Cadmium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Chromium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Cobalt	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Fluoride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Lead	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Lithium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Mercury	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Molybdenum	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Selenium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
	Thallium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
Radium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14	
Field Parameters	Groundwater Elevation	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	Well Depth	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	pH (field)	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	Specific Conductance	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	Dissolved Oxygen	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	ORP	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	Temperature	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	Turbidity	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	Color	x	x	x	x	x	x	x	x	x	x	x	x	x		13
	Odor	x	x	x	x	x	x	x	x	x	x	x	x	x		13

Notes: All samples are unfiltered (total).

C:\Users\FredrickS\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\988AX5W4\[Table_1_BGS_CCR_

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-183333-1

Login Number: 183333

List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1

Creator: Miller, Drew E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Table 1. Groundwater Monitoring Results - Field Parameters
Burlington Generating Station / SCS Engineers Project No. 25220066
June 2020

Sample	Sample Date/Time	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µmhos/cm)	ORP (mV)	Turbidity	Groundwater Elevation (amsl)
MW-301	6/3/20 @ 1130	13.4	6.99	0.25	1167	37.1	20.15	523.94
MW-302	6/3/20 @ 1235	12.9	7.88	0.18	1245	36.7	25.27	523.98
MW-303	6/3/20 @ 1325	14.8	7.12	0.18	934	58.1	16.03	523.97
MW-304	6/3/20 @ 1415	14.6	7.23	0.15	1087	52.4	18.18	524.02
MW-305	6/3/20 @ 1725	15.9	7.12	0.14	972	39.8	13.46	524.12
MW-306	6/4/20 @ 0950	14.4	10.48	0.16	482	59.0	15.96	524.45
MW-307	6/4/20 @ 0850	14.8	10.03	0.30	586	60.2	14.33	524.62
MW-308	6/3/20 @ 0945	15.4	9.65	0.23	713	28.0	13.38	524.10
MW-309	6/3/20 @ 0910	14.8	7.09	0.23	1086	37.0	18.88	524.06
MW-310	6/2/20 @ 1430	12.8	7.30	0.13	881	38.6	17.82	525.36
MW-311	6/2/20 @ 1550	12.3	7.10	0.16	1464	-1.1	17.95	524.05
MW-312	6/3/20 @ 1620	14.7	7.13	0.17	878	53.3	21.16	524.05
MW-313	6/3/2020 @ 1518	17.2	7.03	0.29	1099	50.9	50.81	524.02

Abbreviations:
 mg/L = milligrams per liter amsl = above mean sea level
 mV = millivolts µmhos/cm = micromohs per cm

Notes:
 None

Created by: MDB Date: 6/11/2019
 Last revision by: MDB Date: 6/9/2020
 Checked by: AJR Date: 6/10/2020

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ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-183333-2

Client Project/Site: Burlington Gen. Station 25220066

For:

SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Attn: Meghan Blodgett



Authorized for release by:
7/7/2020 1:17:50 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Job ID: 310-183333-2

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-183333-2

Comments

No additional comments.

Receipt

The samples were received on 6/5/2020 12:15 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

RAD

Method 903.0: Radium 226 Prep Batch 160-473224: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. Field Blank (310-183333-1), MW-301 (310-183333-2), MW-302 (310-183333-3), MW-303 (310-183333-4), MW-304 (310-183333-5), MW-305 (310-183333-6), MW-306 (310-183333-7), MW-307 (310-183333-8), MW-308 (310-183333-9), MW-309 (310-183333-10), MW-310 (310-183333-11), MW-311 (310-183333-12), MW-312 (310-183333-13), MW-313 (310-183333-14), (LCS 160-473224/1-A), (MB 160-473224/23-A), (160-38308-C-1-A) and (160-38308-C-1-B DU)

Method 904.0: Radium-228 Prep Batch 160-473225 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. Field Blank (310-183333-1), MW-301 (310-183333-2), MW-302 (310-183333-3), MW-303 (310-183333-4), MW-304 (310-183333-5), MW-305 (310-183333-6), MW-306 (310-183333-7), MW-307 (310-183333-8), MW-308 (310-183333-9), MW-309 (310-183333-10), MW-310 (310-183333-11), MW-311 (310-183333-12), MW-312 (310-183333-13), MW-313 (310-183333-14), (LCS 160-473225/1-A), (MB 160-473225/23-A), (160-38308-C-1-C) and (160-38308-C-1-D DU)

Method PrecSep_0: Radium 228 Prep Batch 160-473225: The following samples were prepared at a reduced aliquot due to yellow discoloration: MW-301 (310-183333-2), MW-303 (310-183333-4), MW-305 (310-183333-6), MW-307 (310-183333-8), MW-308 (310-183333-9) and MW-309 (310-183333-10).

Method PrecSep-21: Radium 226 Prep Batch 160-473224: The following samples were prepared at a reduced aliquot due to yellow discoloration: MW-301 (310-183333-2), MW-303 (310-183333-4), MW-305 (310-183333-6), MW-307 (310-183333-8), MW-308 (310-183333-9) and MW-309 (310-183333-10).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Sample Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-183333-1	Field Blank	Water	06/04/20 09:15	06/05/20 12:15	
310-183333-2	MW-301	Water	06/03/20 11:30	06/05/20 12:15	
310-183333-3	MW-302	Water	06/03/20 12:35	06/05/20 12:15	
310-183333-4	MW-303	Water	06/03/20 13:25	06/05/20 12:15	
310-183333-5	MW-304	Water	06/03/20 14:15	06/05/20 12:15	
310-183333-6	MW-305	Water	06/03/20 17:25	06/05/20 12:15	
310-183333-7	MW-306	Water	06/04/20 09:50	06/05/20 12:15	
310-183333-8	MW-307	Water	06/04/20 08:50	06/05/20 12:15	
310-183333-9	MW-308	Water	06/04/20 09:45	06/05/20 12:15	
310-183333-10	MW-309	Water	06/03/20 09:10	06/05/20 12:15	
310-183333-11	MW-310	Water	06/02/20 14:30	06/05/20 12:15	
310-183333-12	MW-311	Water	06/02/20 15:50	06/05/20 12:15	
310-183333-13	MW-312	Water	06/03/20 16:25	06/05/20 12:15	
310-183333-14	MW-313	Water	06/03/20 15:18	06/05/20 12:15	

Detection Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: Field Blank	Lab Sample ID: 310-183333-1
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-301	Lab Sample ID: 310-183333-2
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-302	Lab Sample ID: 310-183333-3
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-303	Lab Sample ID: 310-183333-4
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-304	Lab Sample ID: 310-183333-5
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-305	Lab Sample ID: 310-183333-6
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-306	Lab Sample ID: 310-183333-7
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-307	Lab Sample ID: 310-183333-8
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-308	Lab Sample ID: 310-183333-9
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-309	Lab Sample ID: 310-183333-10
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-310	Lab Sample ID: 310-183333-11
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-311	Lab Sample ID: 310-183333-12
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-312	Lab Sample ID: 310-183333-13
<input type="checkbox"/> No Detections.	
Client Sample ID: MW-313	Lab Sample ID: 310-183333-14
<input type="checkbox"/> No Detections.	

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: Field Blank

Lab Sample ID: 310-183333-1

Date Collected: 06/04/20 09:15

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0335	U	0.0555	0.0556	1.00	0.0967	pCi/L	06/12/20 08:46	07/07/20 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/12/20 08:46	07/07/20 07:31	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0516	U	0.162	0.162	1.00	0.302	pCi/L	06/12/20 09:15	06/26/20 11:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/12/20 09:15	06/26/20 11:36	1
Y Carrier	90.5		40 - 110					06/12/20 09:15	06/26/20 11:36	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0335	U	0.171	0.171	5.00	0.302	pCi/L		07/07/20 12:17	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-301

Lab Sample ID: 310-183333-2

Date Collected: 06/03/20 11:30

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.553		0.147	0.155	1.00	0.111	pCi/L	06/12/20 08:46	07/07/20 07:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/12/20 08:46	07/07/20 07:32	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.376	U	0.265	0.267	1.00	0.411	pCi/L	06/12/20 09:15	06/26/20 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/12/20 09:15	06/26/20 11:37	1
Y Carrier	90.8		40 - 110					06/12/20 09:15	06/26/20 11:37	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.928		0.303	0.309	5.00	0.411	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-302

Lab Sample ID: 310-183333-3

Date Collected: 06/03/20 12:35

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.263		0.0975	0.100	1.00	0.107	pCi/L	06/12/20 08:46	07/07/20 07:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/12/20 08:46	07/07/20 07:32	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.363	U	0.251	0.253	1.00	0.394	pCi/L	06/12/20 09:15	06/26/20 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/12/20 09:15	06/26/20 11:37	1
Y Carrier	90.1		40 - 110					06/12/20 09:15	06/26/20 11:37	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.626		0.269	0.272	5.00	0.394	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-303

Lab Sample ID: 310-183333-4

Date Collected: 06/03/20 13:25

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.804		0.169	0.184	1.00	0.0912	pCi/L	06/12/20 08:46	07/07/20 07:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/12/20 08:46	07/07/20 07:33	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0877	U	0.295	0.295	1.00	0.511	pCi/L	06/12/20 09:15	06/26/20 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/12/20 09:15	06/26/20 11:37	1
Y Carrier	87.5		40 - 110					06/12/20 09:15	06/26/20 11:37	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.892		0.340	0.348	5.00	0.511	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-304

Lab Sample ID: 310-183333-5

Date Collected: 06/03/20 14:15

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.300		0.0958	0.0996	1.00	0.0810	pCi/L	06/12/20 08:46	07/07/20 07:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					06/12/20 08:46	07/07/20 07:33	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.272	U	0.234	0.235	1.00	0.375	pCi/L	06/12/20 09:15	06/26/20 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					06/12/20 09:15	06/26/20 11:37	1
Y Carrier	89.3		40 - 110					06/12/20 09:15	06/26/20 11:37	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.573		0.253	0.255	5.00	0.375	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-305

Lab Sample ID: 310-183333-6

Date Collected: 06/03/20 17:25

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.248		0.103	0.106	1.00	0.0986	pCi/L	06/12/20 08:46	07/07/20 07:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.7		40 - 110					06/12/20 08:46	07/07/20 07:33	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.511		0.286	0.290	1.00	0.426	pCi/L	06/12/20 09:15	06/26/20 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.7		40 - 110					06/12/20 09:15	06/26/20 11:37	1
Y Carrier	89.7		40 - 110					06/12/20 09:15	06/26/20 11:37	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.759		0.304	0.309	5.00	0.426	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-306

Lab Sample ID: 310-183333-7

Date Collected: 06/04/20 09:50

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0516	U	0.0450	0.0453	1.00	0.0638	pCi/L	06/12/20 08:46	07/07/20 07:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/12/20 08:46	07/07/20 07:33	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0253	U	0.177	0.177	1.00	0.313	pCi/L	06/12/20 09:15	06/26/20 11:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/12/20 09:15	06/26/20 11:37	1
Y Carrier	88.6		40 - 110					06/12/20 09:15	06/26/20 11:37	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0769	U	0.183	0.183	5.00	0.313	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-307

Lab Sample ID: 310-183333-8

Date Collected: 06/04/20 08:50

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0806	U	0.0700	0.0703	1.00	0.101	pCi/L	06/12/20 08:46	07/07/20 07:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		40 - 110					06/12/20 08:46	07/07/20 07:33	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.197	U	0.281	0.282	1.00	0.471	pCi/L	06/12/20 09:15	06/26/20 11:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		40 - 110					06/12/20 09:15	06/26/20 11:38	1
Y Carrier	88.6		40 - 110					06/12/20 09:15	06/26/20 11:38	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.277	U	0.290	0.291	5.00	0.471	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-308

Lab Sample ID: 310-183333-9

Date Collected: 06/04/20 09:45

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.109	U	0.0837	0.0843	1.00	0.118	pCi/L	06/12/20 08:46	07/07/20 07:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.4		40 - 110					06/12/20 08:46	07/07/20 07:34	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.159	U	0.249	0.249	1.00	0.420	pCi/L	06/12/20 09:15	06/26/20 11:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.4		40 - 110					06/12/20 09:15	06/26/20 11:38	1
Y Carrier	89.7		40 - 110					06/12/20 09:15	06/26/20 11:38	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.268	U	0.263	0.263	5.00	0.420	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-309

Lab Sample ID: 310-183333-10

Date Collected: 06/03/20 09:10

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.182		0.0969	0.0983	1.00	0.117	pCi/L	06/12/20 08:46	07/07/20 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					06/12/20 08:46	07/07/20 07:35	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.232	0.232	1.00	0.398	pCi/L	06/12/20 09:15	06/26/20 11:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					06/12/20 09:15	06/26/20 11:38	1
Y Carrier	89.7		40 - 110					06/12/20 09:15	06/26/20 11:38	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.296	U	0.251	0.252	5.00	0.398	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-310

Lab Sample ID: 310-183333-11

Date Collected: 06/02/20 14:30

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.457		0.116	0.123	1.00	0.0860	pCi/L	06/12/20 08:46	07/07/20 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/12/20 08:46	07/07/20 07:35	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.387		0.215	0.218	1.00	0.321	pCi/L	06/12/20 09:15	06/26/20 11:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/12/20 09:15	06/26/20 11:38	1
Y Carrier	89.0		40 - 110					06/12/20 09:15	06/26/20 11:38	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.844		0.244	0.250	5.00	0.321	pCi/L		07/07/20 12:17	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-311

Lab Sample ID: 310-183333-12

Date Collected: 06/02/20 15:50

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.324		0.102	0.106	1.00	0.0867	pCi/L	06/12/20 08:46	07/07/20 07:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/12/20 08:46	07/07/20 07:35	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.479		0.226	0.230	1.00	0.325	pCi/L	06/12/20 09:15	06/26/20 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/12/20 09:15	06/26/20 11:39	1
Y Carrier	89.0		40 - 110					06/12/20 09:15	06/26/20 11:39	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.802		0.248	0.253	5.00	0.325	pCi/L		07/07/20 12:17	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-312

Lab Sample ID: 310-183333-13

Date Collected: 06/03/20 16:25

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.356		0.101	0.106	1.00	0.0681	pCi/L	06/12/20 08:46	07/07/20 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.1		40 - 110					06/12/20 08:46	07/07/20 09:23	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.187	U	0.198	0.198	1.00	0.323	pCi/L	06/12/20 09:15	06/26/20 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.1		40 - 110					06/12/20 09:15	06/26/20 11:39	1
Y Carrier	89.7		40 - 110					06/12/20 09:15	06/26/20 11:39	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.543		0.222	0.225	5.00	0.323	pCi/L		07/07/20 12:17	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-313

Lab Sample ID: 310-183333-14

Date Collected: 06/03/20 15:18

Matrix: Water

Date Received: 06/05/20 12:15

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.18		0.180	0.209	1.00	0.0979	pCi/L	06/12/20 08:46	07/07/20 09:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/12/20 08:46	07/07/20 09:23	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.631		0.217	0.224	1.00	0.286	pCi/L	06/12/20 09:15	06/26/20 11:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/12/20 09:15	06/26/20 11:39	1
Y Carrier	95.0		40 - 110					06/12/20 09:15	06/26/20 11:39	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.81		0.282	0.306	5.00	0.286	pCi/L		07/07/20 12:17	1



Definitions/Glossary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-473224/23-A
Matrix: Water
Analysis Batch: 475699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473224

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02681	U	0.0476	0.0476	1.00	0.0845	pCi/L	06/12/20 08:46	07/07/20 09:24	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	102		40 - 110					06/12/20 08:46	07/07/20 09:24	1

Lab Sample ID: LCS 160-473224/1-A
Matrix: Water
Analysis Batch: 475699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473224

Analyte	Spike Added	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec. Limits
		Result	Qual	Uncert. (2σ+/-)					
Radium-226	11.3	10.37		1.06	1.00	0.0635	pCi/L	91	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	105		40 - 110					06/12/20 08:46	07/07/20 09:24

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-473225/23-A
Matrix: Water
Analysis Batch: 474756

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473225

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.2894	U	0.196	0.198	1.00	0.304	pCi/L	06/12/20 09:15	06/26/20 11:45	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	102		40 - 110					06/12/20 09:15	06/26/20 11:45	1
Y Carrier	93.1		40 - 110		06/12/20 09:15	06/26/20 11:45	1			

Lab Sample ID: LCS 160-473225/1-A
Matrix: Water
Analysis Batch: 474572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473225

Analyte	Spike Added	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec. Limits
		Result	Qual	Uncert. (2σ+/-)					
Radium-228	8.72	8.085		0.927	1.00	0.297	pCi/L	93	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	105		40 - 110					06/12/20 09:15	06/26/20 11:45
Y Carrier	90.5		40 - 110		06/12/20 09:15	06/26/20 11:45	1		

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QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Rad

Prep Batch: 473224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	PrecSep-21	
310-183333-2	MW-301	Total/NA	Water	PrecSep-21	
310-183333-3	MW-302	Total/NA	Water	PrecSep-21	
310-183333-4	MW-303	Total/NA	Water	PrecSep-21	
310-183333-5	MW-304	Total/NA	Water	PrecSep-21	
310-183333-6	MW-305	Total/NA	Water	PrecSep-21	
310-183333-7	MW-306	Total/NA	Water	PrecSep-21	
310-183333-8	MW-307	Total/NA	Water	PrecSep-21	
310-183333-9	MW-308	Total/NA	Water	PrecSep-21	
310-183333-10	MW-309	Total/NA	Water	PrecSep-21	
310-183333-11	MW-310	Total/NA	Water	PrecSep-21	
310-183333-12	MW-311	Total/NA	Water	PrecSep-21	
310-183333-13	MW-312	Total/NA	Water	PrecSep-21	
310-183333-14	MW-313	Total/NA	Water	PrecSep-21	
MB 160-473224/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-473224/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 473225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-183333-1	Field Blank	Total/NA	Water	PrecSep_0	
310-183333-2	MW-301	Total/NA	Water	PrecSep_0	
310-183333-3	MW-302	Total/NA	Water	PrecSep_0	
310-183333-4	MW-303	Total/NA	Water	PrecSep_0	
310-183333-5	MW-304	Total/NA	Water	PrecSep_0	
310-183333-6	MW-305	Total/NA	Water	PrecSep_0	
310-183333-7	MW-306	Total/NA	Water	PrecSep_0	
310-183333-8	MW-307	Total/NA	Water	PrecSep_0	
310-183333-9	MW-308	Total/NA	Water	PrecSep_0	
310-183333-10	MW-309	Total/NA	Water	PrecSep_0	
310-183333-11	MW-310	Total/NA	Water	PrecSep_0	
310-183333-12	MW-311	Total/NA	Water	PrecSep_0	
310-183333-13	MW-312	Total/NA	Water	PrecSep_0	
310-183333-14	MW-313	Total/NA	Water	PrecSep_0	
MB 160-473225/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-473225/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: Field Blank

Lab Sample ID: 310-183333-1

Date Collected: 06/04/20 09:15

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:31	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:36	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-301

Lab Sample ID: 310-183333-2

Date Collected: 06/03/20 11:30

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:32	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:37	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-302

Lab Sample ID: 310-183333-3

Date Collected: 06/03/20 12:35

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:32	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:37	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-303

Lab Sample ID: 310-183333-4

Date Collected: 06/03/20 13:25

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:33	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:37	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

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Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-304

Lab Sample ID: 310-183333-5

Date Collected: 06/03/20 14:15

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:33	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:37	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-305

Lab Sample ID: 310-183333-6

Date Collected: 06/03/20 17:25

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:33	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:37	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-306

Lab Sample ID: 310-183333-7

Date Collected: 06/04/20 09:50

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:33	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:37	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-307

Lab Sample ID: 310-183333-8

Date Collected: 06/04/20 08:50

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:33	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:38	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-308

Lab Sample ID: 310-183333-9

Date Collected: 06/04/20 09:45

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:34	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:38	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-309

Lab Sample ID: 310-183333-10

Date Collected: 06/03/20 09:10

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:35	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:38	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-310

Lab Sample ID: 310-183333-11

Date Collected: 06/02/20 14:30

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:35	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:38	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-311

Lab Sample ID: 310-183333-12

Date Collected: 06/02/20 15:50

Matrix: Water

Date Received: 06/05/20 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 07:35	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:39	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Client Sample ID: MW-312

Date Collected: 06/03/20 16:25

Date Received: 06/05/20 12:15

Lab Sample ID: 310-183333-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 09:23	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:39	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Client Sample ID: MW-313

Date Collected: 06/03/20 15:18

Date Received: 06/05/20 12:15

Lab Sample ID: 310-183333-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			473224	06/12/20 08:46	RBR	TAL SL
Total/NA	Analysis	903.0		1	475699	07/07/20 09:23	JLC	TAL SL
Total/NA	Prep	PrecSep_0			473225	06/12/20 09:15	RBR	TAL SL
Total/NA	Analysis	904.0		1	474572	06/26/20 11:39	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	475709	07/07/20 12:17	SMP	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Laboratory: Eurofins TestAmerica, Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-21

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	07-01-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Method Summary

Client: SCS Engineers
Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	TAL SL
904.0	Radium-228 (GFPC)	EPA	TAL SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

EPA = US Environmental Protection Agency
None = None
TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: <u>SCS Engineers</u>			
City/State: <small>CITY</small> <u>Clive</u> <small>STATE</small> <u>IA</u>	Project: <u>Burlington Gen Station</u>		
Receipt Information			
Date/Time Received: <small>DATE</small> <u>6/5/20</u> <small>TIME</small> <u>0935</u>	Received By: <u>EAM</u>		
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>3</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: <u>0</u>	Correction Factor (°C): <u>+0.1</u>		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C): <u>+3.2</u>	Corrected Temp (°C): <u>+3.3</u>		
• Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Chain of Custody Record

Client Information Client Contact: Louise Jennings Company: SCS Engineers Address: 8450 Hickman Road Suite 20 City: Clive State, Zip: IA, 50325 Phone: PO #: 25220066 Email: ljennings@scsengineers.com Project Name: Burlington Gen. Station 25220066 Site:		Lab PM: Friedrich, Sandie E-Mail: sandie.friedrick@testamericainc.com Carrier Tracking No(s): COC No: 310-49932-14654.1 Page: Page 2 of 3 Job #:				
Due Date Requested: TAT Requested (days): PO #: WO #: Project #: SSOW#:		Analysis Requested Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) 6020A - Metals - Hg 2540C Calcd, 9056A_ORGFM_28D, SM4500_H+ 903.0 - Radium 226 904.0 - Radium 228				
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, D=dewatered, BT=issue, A=air)	Preservation Code:	Special Instructions/Note:
MW-304	6/3/20	14:15	G	Water	N	
MW-305	6/3/20	17:25	G	Water	N	
MW-306	6/4/20	9:50	G	Water	N	
MW-307	6/4/20	8:50	G	Water	N	
MW-308	6/3/20	9:45	G	Water	N	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)						
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:						
Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i> Relinquished by:		Date/Time: 6/4/20 1630 Date/Time: Date/Time:		Method of Shipment: Received by: <i>[Signature]</i> Received by: Received by:		
Relinquished by: Relinquished by: Relinquished by:		Date/Time: Date/Time: Date/Time:		Company: SCS Company: Company:		
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		



Client Information Client Contact: Louise Jennings Company: SCS Engineers Address: 8450 Hickman Road Suite 20 City: Clive State, Zip: IA, 50325 Phone: 25220066 Email: ljennings@scsengineers.com Project Name: Burlington Gen. Station 25220066 Site:		Lab PM: Fredrick, Sandie E-Mail: sandie.fredrick@testamericainc.com Carrier Tracking No(s): COC No: 310-49932-14654.1 Page: 3 of 3 Job #:	
Due Date Requested: TAT Requested (days): PO #: 25220066 WO #:		Analysis Requested 6020A - Metals - Hg 2540C, Calcd, ORGM, 28D, SM4500, H+ 903.0 - Radium 226 904.0 - Radium 228 Total Number of Containers:	
Sample Identification MW-309 MW-310 MW-311 MW-312 MW-313	Sample Date 6/3/20 6/2/20 6/2/20 6/3/20 6/3/20	Sample Time 9:10 14:30 15:50 16:25 15:18	Sample Type (C=comp, G=grab) G G G G G Preservation Code: Water Water Water Water Water
Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	D N D N D N D N D N	X X X X X X X X X	Special Instructions/Note: D N D N D N D N D N

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Empty, Kiosk Relinquished by: *[Signature]* Date: 6/4/20 1630
 Relinquished by: *[Signature]* Date/Time: *[Signature]*
 Relinquished by: *[Signature]* Date/Time: *[Signature]*
 Relinquished by: *[Signature]* Date/Time: *[Signature]*

Company: SCS
 Date/Time: 6/4/20 1630
 Date/Time: *[Signature]*
 Date/Time: *[Signature]*

Cooler Temperature(s) °C and Other Remarks:
 Δ Yes Δ No Custody Seal No. *[Signature]*

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-183333-2

Login Number: 183333

List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1

Creator: Miller, Drew E

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-183333-2

Login Number: 183333

List Number: 2

Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis

List Creation: 06/08/20 07:02 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Tracer/Carrier Summary

Client: SCS Engineers
 Project/Site: Burlington Gen. Station 25220066

Job ID: 310-183333-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba Carrier (40-110)	
310-183333-1	Field Blank	101	
310-183333-2	MW-301	97.9	
310-183333-3	MW-302	101	
310-183333-4	MW-303	100	
310-183333-5	MW-304	95.0	
310-183333-6	MW-305	96.7	
310-183333-7	MW-306	104	
310-183333-8	MW-307	95.5	
310-183333-9	MW-308	96.4	
310-183333-10	MW-309	98.8	
310-183333-11	MW-310	100	
310-183333-12	MW-311	94.1	
310-183333-13	MW-312	96.1	
310-183333-14	MW-313	99.7	
LCS 160-473224/1-A	Lab Control Sample	105	
MB 160-473224/23-A	Method Blank	102	

Tracer/Carrier Legend

Ba Carrier = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Yield (Acceptance Limits)	
		Ba Carrier (40-110)	Y Carrier (40-110)
310-183333-1	Field Blank	101	90.5
310-183333-2	MW-301	97.9	90.8
310-183333-3	MW-302	101	90.1
310-183333-4	MW-303	100	87.5
310-183333-5	MW-304	95.0	89.3
310-183333-6	MW-305	96.7	89.7
310-183333-7	MW-306	104	88.6
310-183333-8	MW-307	95.5	88.6
310-183333-9	MW-308	96.4	89.7
310-183333-10	MW-309	98.8	89.7
310-183333-11	MW-310	100	89.0
310-183333-12	MW-311	94.1	89.0
310-183333-13	MW-312	96.1	89.7
310-183333-14	MW-313	99.7	95.0
LCS 160-473225/1-A	Lab Control Sample	105	90.5
MB 160-473225/23-A	Method Blank	102	93.1

Tracer/Carrier Legend

Ba Carrier = Ba Carrier

Y Carrier = Y Carrier



C2 September 2020 Assessment Monitoring – New Wells

ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-190539-1

Client Project/Site: Burlington Gen Station 25220066
Revision: 1

For:
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Attn: Meghan Blodgett



Authorized for release by:
9/18/2020 9:55:54 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

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Case Narrative

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Job ID: 310-190539-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-190539-1

Comments

No additional comments.

Revision

The report being provided is a revision of the original report sent on 9/16/2020. The report (revision 1) is being revised due to: Suspected sample carryover - reanalysis required for metals..

Receipt

The samples were received on 9/11/2020 12:40 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7° C.

HPLC/IC

Method 9056A: The following samples were diluted due to the nature of the sample matrix: MW-302A (310-190539-1), MW-307A (310-190539-2), MW-310A (310-190539-3) and MW-313A (310-190539-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-190539-1	MW-302A	Water	09/09/20 12:30	09/11/20 12:40	
310-190539-2	MW-307A	Water	09/09/20 10:15	09/11/20 12:40	
310-190539-3	MW-310A	Water	09/09/20 14:50	09/11/20 12:40	
310-190539-4	MW-313A	Water	09/09/20 11:25	09/11/20 12:40	
310-190539-5	Field Blank	Water	09/09/20 10:15	09/11/20 12:40	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-302A

Lab Sample ID: 310-190539-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	340		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	2.9		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	270		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	11000		700	560	ug/L	7		6020A	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.12	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lead	0.11	J	0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	11		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	730		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.71				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-142.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.27				mg/L	1		Field Sampling	Total/NA
pH, Field	7.31				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1013				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	13.3				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.01				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-307A

Lab Sample ID: 310-190539-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	34		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	110		5.0	3.6	mg/L	5		9056A	Total/NA
Barium	45		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	3900		100	80	ug/L	1		6020A	Total/NA
Cadmium	0.058	J	0.10	0.049	ug/L	1		6020A	Total/NA
Calcium	10		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.11	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lead	0.69		0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	6.8	J	10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	110		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	370		30	26	mg/L	1		SM 2540C	Total/NA
pH	8.0	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.97				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-154.2				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.17				mg/L	1		Field Sampling	Total/NA
pH, Field	7.83				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	585				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.4				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-310A

Lab Sample ID: 310-190539-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		5.0	2.0	mg/L	5		9056A	Total/NA
Fluoride	0.27	J	0.50	0.23	mg/L	5		9056A	Total/NA
Sulfate	100		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	1.1		1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	15		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	290		2.0	0.28	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-310A (Continued)

Lab Sample ID: 310-190539-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	2.3		1.0	0.27	ug/L	1		6020A	Total/NA
Boron	2200		100	80	ug/L	1		6020A	Total/NA
Cadmium	0.69		0.10	0.049	ug/L	1		6020A	Total/NA
Calcium	150		0.50	0.19	mg/L	1		6020A	Total/NA
Chromium	5.4		5.0	1.1	ug/L	1		6020A	Total/NA
Cobalt	28		0.50	0.091	ug/L	1		6020A	Total/NA
Lead	20		0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	32		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	19		2.0	1.1	ug/L	1		6020A	Total/NA
Selenium	1.5	J	5.0	1.0	ug/L	1		6020A	Total/NA
Total Dissolved Solids	570		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.7	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	509.16				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	145.3				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	4.68				mg/L	1		Field Sampling	Total/NA
pH, Field	7.33				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1026				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.2				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	714.3				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-313A

Lab Sample ID: 310-190539-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	210		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	200		5.0	3.6	mg/L	5		9056A	Total/NA
Barium	270		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	4300		100	80	ug/L	1		6020A	Total/NA
Calcium	48		0.50	0.19	mg/L	1		6020A	Total/NA
Lithium	13		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	730		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.7	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	515.36				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-164.4				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.21				mg/L	1		Field Sampling	Total/NA
pH, Field	7.60				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1243				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	15.3				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: Field Blank

Lab Sample ID: 310-190539-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	6.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-302A

Lab Sample ID: 310-190539-1

Date Collected: 09/09/20 12:30

Matrix: Water

Date Received: 09/11/20 12:40

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		5.0	2.0	mg/L			09/14/20 13:53	5
Fluoride	<0.23		0.50	0.23	mg/L			09/14/20 13:53	5
Sulfate	340		5.0	3.6	mg/L			09/14/20 13:53	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		09/14/20 08:43	09/15/20 13:34	1
Arsenic	2.9		2.0	0.88	ug/L		09/14/20 08:43	09/15/20 13:34	1
Barium	270		2.0	0.28	ug/L		09/14/20 08:43	09/15/20 13:34	1
Beryllium	<0.27		1.0	0.27	ug/L		09/14/20 08:43	09/15/20 13:34	1
Boron	11000		700	560	ug/L		09/14/20 08:43	09/16/20 12:11	7
Cadmium	<0.049		0.10	0.049	ug/L		09/14/20 08:43	09/15/20 13:34	1
Calcium	120		0.50	0.19	mg/L		09/14/20 08:43	09/15/20 13:34	1
Chromium	<1.1		5.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:34	1
Cobalt	0.12	J	0.50	0.091	ug/L		09/14/20 08:43	09/15/20 13:34	1
Lead	0.11	J	0.50	0.11	ug/L		09/14/20 08:43	09/15/20 13:34	1
Lithium	11		10	2.5	ug/L		09/14/20 08:43	09/15/20 13:34	1
Molybdenum	120		2.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:34	1
Selenium	<1.0		5.0	1.0	ug/L		09/14/20 08:43	09/15/20 13:34	1
Thallium	<0.26		1.0	0.26	ug/L		09/14/20 08:43	09/15/20 13:34	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		09/15/20 11:33	09/16/20 09:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	730		30	26	mg/L			09/14/20 09:58	1
pH	7.4	HF	0.1	0.1	SU			09/11/20 15:18	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.71				ft			09/09/20 12:30	1
Oxidation Reduction Potential	-142.0				millivolts			09/09/20 12:30	1
Oxygen, Dissolved, Client Supplied	0.27				mg/L			09/09/20 12:30	1
pH, Field	7.31				SU			09/09/20 12:30	1
Specific Conductance, Field	1013				umhos/cm			09/09/20 12:30	1
Temperature, Field	13.3				Degrees C			09/09/20 12:30	1
Turbidity, Field	0.01				NTU			09/09/20 12:30	1

Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-307A

Lab Sample ID: 310-190539-2

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34		5.0	2.0	mg/L			09/14/20 14:09	5
Fluoride	<0.23		0.50	0.23	mg/L			09/14/20 14:09	5
Sulfate	110		5.0	3.6	mg/L			09/14/20 14:09	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		09/14/20 08:43	09/15/20 13:36	1
Arsenic	<0.88		2.0	0.88	ug/L		09/14/20 08:43	09/15/20 13:36	1
Barium	45		2.0	0.28	ug/L		09/14/20 08:43	09/15/20 13:36	1
Beryllium	<0.27		1.0	0.27	ug/L		09/14/20 08:43	09/15/20 13:36	1
Boron	3900		100	80	ug/L		09/14/20 08:43	09/15/20 13:36	1
Cadmium	0.058	J	0.10	0.049	ug/L		09/14/20 08:43	09/15/20 13:36	1
Calcium	10		0.50	0.19	mg/L		09/14/20 08:43	09/15/20 13:36	1
Chromium	<1.1		5.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:36	1
Cobalt	0.11	J	0.50	0.091	ug/L		09/14/20 08:43	09/15/20 13:36	1
Lead	0.69		0.50	0.11	ug/L		09/14/20 08:43	09/15/20 13:36	1
Lithium	6.8	J	10	2.5	ug/L		09/14/20 08:43	09/15/20 13:36	1
Molybdenum	110		2.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:36	1
Selenium	<1.0		5.0	1.0	ug/L		09/14/20 08:43	09/15/20 13:36	1
Thallium	<0.26		1.0	0.26	ug/L		09/14/20 08:43	09/15/20 13:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		09/15/20 11:33	09/16/20 09:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		30	26	mg/L			09/14/20 09:58	1
pH	8.0	HF	0.1	0.1	SU			09/11/20 15:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.97				ft			09/09/20 10:15	1
Oxidation Reduction Potential	-154.2				millivolts			09/09/20 10:15	1
Oxygen, Dissolved, Client Supplied	0.17				mg/L			09/09/20 10:15	1
pH, Field	7.83				SU			09/09/20 10:15	1
Specific Conductance, Field	585				umhos/cm			09/09/20 10:15	1
Temperature, Field	14.4				Degrees C			09/09/20 10:15	1
Turbidity, Field	0.00				NTU			09/09/20 10:15	1

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-310A

Lab Sample ID: 310-190539-3

Date Collected: 09/09/20 14:50

Matrix: Water

Date Received: 09/11/20 12:40

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		5.0	2.0	mg/L			09/14/20 14:24	5
Fluoride	0.27	J	0.50	0.23	mg/L			09/14/20 14:24	5
Sulfate	100		5.0	3.6	mg/L			09/14/20 14:24	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1		1.0	0.51	ug/L		09/14/20 08:43	09/15/20 13:39	1
Arsenic	15		2.0	0.88	ug/L		09/14/20 08:43	09/15/20 13:39	1
Barium	290		2.0	0.28	ug/L		09/14/20 08:43	09/15/20 13:39	1
Beryllium	2.3		1.0	0.27	ug/L		09/14/20 08:43	09/15/20 13:39	1
Boron	2200		100	80	ug/L		09/14/20 08:43	09/15/20 13:39	1
Cadmium	0.69		0.10	0.049	ug/L		09/14/20 08:43	09/15/20 13:39	1
Calcium	150		0.50	0.19	mg/L		09/14/20 08:43	09/15/20 13:39	1
Chromium	5.4		5.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:39	1
Cobalt	28		0.50	0.091	ug/L		09/14/20 08:43	09/15/20 13:39	1
Lead	20		0.50	0.11	ug/L		09/14/20 08:43	09/15/20 13:39	1
Lithium	32		10	2.5	ug/L		09/14/20 08:43	09/15/20 13:39	1
Molybdenum	19		2.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:39	1
Selenium	1.5	J	5.0	1.0	ug/L		09/14/20 08:43	09/15/20 13:39	1
Thallium	<0.26		1.0	0.26	ug/L		09/14/20 08:43	09/15/20 13:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		09/15/20 11:33	09/16/20 09:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	570		30	26	mg/L			09/14/20 09:58	1
pH	7.7	HF	0.1	0.1	SU			09/11/20 15:20	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	509.16				ft			09/09/20 14:50	1
Oxidation Reduction Potential	145.3				millivolts			09/09/20 14:50	1
Oxygen, Dissolved, Client Supplied	4.68				mg/L			09/09/20 14:50	1
pH, Field	7.33				SU			09/09/20 14:50	1
Specific Conductance, Field	1026				umhos/cm			09/09/20 14:50	1
Temperature, Field	14.2				Degrees C			09/09/20 14:50	1
Turbidity, Field	714.3				NTU			09/09/20 14:50	1

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-313A

Lab Sample ID: 310-190539-4

Date Collected: 09/09/20 11:25

Matrix: Water

Date Received: 09/11/20 12:40

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		5.0	2.0	mg/L			09/14/20 14:40	5
Fluoride	<0.23		0.50	0.23	mg/L			09/14/20 14:40	5
Sulfate	200		5.0	3.6	mg/L			09/14/20 14:40	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		09/14/20 08:43	09/15/20 13:42	1
Arsenic	<0.88		2.0	0.88	ug/L		09/14/20 08:43	09/15/20 13:42	1
Barium	270		2.0	0.28	ug/L		09/14/20 08:43	09/15/20 13:42	1
Beryllium	<0.27		1.0	0.27	ug/L		09/14/20 08:43	09/15/20 13:42	1
Boron	4300		100	80	ug/L		09/14/20 08:43	09/15/20 13:42	1
Cadmium	<0.049		0.10	0.049	ug/L		09/14/20 08:43	09/15/20 13:42	1
Calcium	48		0.50	0.19	mg/L		09/14/20 08:43	09/15/20 13:42	1
Chromium	<1.1		5.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:42	1
Cobalt	<0.091		0.50	0.091	ug/L		09/14/20 08:43	09/15/20 13:42	1
Lead	<0.11		0.50	0.11	ug/L		09/14/20 08:43	09/15/20 13:42	1
Lithium	13		10	2.5	ug/L		09/14/20 08:43	09/15/20 13:42	1
Molybdenum	120		2.0	1.1	ug/L		09/14/20 08:43	09/15/20 13:42	1
Selenium	<1.0		5.0	1.0	ug/L		09/14/20 08:43	09/15/20 13:42	1
Thallium	<0.26		1.0	0.26	ug/L		09/14/20 08:43	09/15/20 13:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		09/15/20 11:33	09/16/20 09:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	730		30	26	mg/L			09/14/20 09:58	1
pH	7.7	HF	0.1	0.1	SU			09/11/20 15:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	515.36				ft			09/09/20 11:25	1
Oxidation Reduction Potential	-164.4				millivolts			09/09/20 11:25	1
Oxygen, Dissolved, Client Supplied	0.21				mg/L			09/09/20 11:25	1
pH, Field	7.60				SU			09/09/20 11:25	1
Specific Conductance, Field	1243				umhos/cm			09/09/20 11:25	1
Temperature, Field	15.3				Degrees C			09/09/20 11:25	1
Turbidity, Field	0.00				NTU			09/09/20 11:25	1

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: Field Blank

Lab Sample ID: 310-190539-5

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		1.0	0.40	mg/L			09/14/20 14:55	1
Fluoride	<0.046		0.10	0.046	mg/L			09/14/20 14:55	1
Sulfate	<0.71		1.0	0.71	mg/L			09/14/20 14:55	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		09/14/20 08:43	09/17/20 12:44	1
Arsenic	<0.88		2.0	0.88	ug/L		09/14/20 08:43	09/17/20 12:44	1
Barium	<0.28		2.0	0.28	ug/L		09/14/20 08:43	09/17/20 12:44	1
Beryllium	<0.27		1.0	0.27	ug/L		09/14/20 08:43	09/17/20 12:44	1
Boron	<80		100	80	ug/L		09/14/20 08:43	09/17/20 12:44	1
Cadmium	<0.049		0.10	0.049	ug/L		09/14/20 08:43	09/17/20 12:44	1
Calcium	<0.19		0.50	0.19	mg/L		09/14/20 08:43	09/17/20 12:44	1
Chromium	<1.1		5.0	1.1	ug/L		09/14/20 08:43	09/17/20 12:44	1
Cobalt	<0.091		0.50	0.091	ug/L		09/14/20 08:43	09/17/20 12:44	1
Lead	<0.11		0.50	0.11	ug/L		09/14/20 08:43	09/17/20 12:44	1
Lithium	<2.5		10	2.5	ug/L		09/14/20 08:43	09/17/20 12:44	1
Molybdenum	<1.1		2.0	1.1	ug/L		09/14/20 08:43	09/17/20 12:44	1
Selenium	<1.0		5.0	1.0	ug/L		09/14/20 08:43	09/17/20 12:44	1
Thallium	<0.26		1.0	0.26	ug/L		09/14/20 08:43	09/17/20 12:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		09/15/20 11:33	09/16/20 09:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			09/14/20 09:58	1
pH	6.2	HF	0.1	0.1	SU			09/11/20 15:29	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-291934/3
Matrix: Water
Analysis Batch: 291934

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		1.0	0.40	mg/L			09/14/20 10:15	1
Fluoride	<0.046		0.10	0.046	mg/L			09/14/20 10:15	1
Sulfate	<0.71		1.0	0.71	mg/L			09/14/20 10:15	1

Lab Sample ID: LCS 310-291934/4
Matrix: Water
Analysis Batch: 291934

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.2		mg/L		102	90 - 110
Fluoride	2.00	2.10		mg/L		105	90 - 110
Sulfate	10.0	10.7		mg/L		107	90 - 110

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 310-291712/1-A
Matrix: Water
Analysis Batch: 292106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 291712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		09/14/20 08:43	09/16/20 12:08	1
Arsenic	<0.88		2.0	0.88	ug/L		09/14/20 08:43	09/16/20 12:08	1
Barium	<0.28		2.0	0.28	ug/L		09/14/20 08:43	09/16/20 12:08	1
Beryllium	<0.27		1.0	0.27	ug/L		09/14/20 08:43	09/16/20 12:08	1
Boron	<80		100	80	ug/L		09/14/20 08:43	09/16/20 12:08	1
Cadmium	<0.049		0.10	0.049	ug/L		09/14/20 08:43	09/16/20 12:08	1
Calcium	<0.19		0.50	0.19	mg/L		09/14/20 08:43	09/16/20 12:08	1
Chromium	<1.1		5.0	1.1	ug/L		09/14/20 08:43	09/16/20 12:08	1
Cobalt	<0.091		0.50	0.091	ug/L		09/14/20 08:43	09/16/20 12:08	1
Lead	<0.11		0.50	0.11	ug/L		09/14/20 08:43	09/16/20 12:08	1
Lithium	<2.5		10	2.5	ug/L		09/14/20 08:43	09/16/20 12:08	1
Molybdenum	<1.1		2.0	1.1	ug/L		09/14/20 08:43	09/16/20 12:08	1
Selenium	<1.0		5.0	1.0	ug/L		09/14/20 08:43	09/16/20 12:08	1
Thallium	<0.26		1.0	0.26	ug/L		09/14/20 08:43	09/16/20 12:08	1

Lab Sample ID: LCS 310-291712/2-A
Matrix: Water
Analysis Batch: 292048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 291712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	200	215		ug/L		108	80 - 120
Arsenic	200	205		ug/L		102	80 - 120
Barium	100	107		ug/L		107	80 - 120
Beryllium	100	103		ug/L		103	80 - 120
Boron	200	236		ug/L		118	80 - 120
Cadmium	100	102		ug/L		102	80 - 120
Calcium	2.00	1.99		mg/L		100	80 - 120
Chromium	100	104		ug/L		104	80 - 120
Cobalt	100	105		ug/L		105	80 - 120

Eurofins TestAmerica, Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 310-291712/2-A
 Matrix: Water
 Analysis Batch: 292048

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 291712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	200	216		ug/L		108	80 - 120
Lithium	200	203		ug/L		101	80 - 120
Molybdenum	200	206		ug/L		103	80 - 120
Selenium	400	400		ug/L		100	80 - 120

Lab Sample ID: LCS 310-291712/2-A ^10
 Matrix: Water
 Analysis Batch: 292048

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 291712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	198		ug/L		99	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-291923/1-A
 Matrix: Water
 Analysis Batch: 292108

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 291923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		09/15/20 11:33	09/16/20 09:05	1

Lab Sample ID: LCS 310-291923/2-A
 Matrix: Water
 Analysis Batch: 292108

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 291923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.67	1.72		ug/L		103	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-291747/1
 Matrix: Water
 Analysis Batch: 291747

Client Sample ID: Method Blank
 Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			09/14/20 09:58	1

Lab Sample ID: LCS 310-291747/2
 Matrix: Water
 Analysis Batch: 291747

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	1000		mg/L		100	90 - 110

Eurofins TestAmerica, Cedar Falls

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-291613/1
Matrix: Water
Analysis Batch: 291613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	98 - 102

Lab Sample ID: LCS 310-291613/15
Matrix: Water
Analysis Batch: 291613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.1		SU		101	98 - 102

Lab Sample ID: LCS 310-291613/16
Matrix: Water
Analysis Batch: 291613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.1		SU		101	98 - 102

Lab Sample ID: LCS 310-291613/17
Matrix: Water
Analysis Batch: 291613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.1		SU		101	98 - 102

Lab Sample ID: LCS 310-291613/18
Matrix: Water
Analysis Batch: 291613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.1		SU		101	98 - 102

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QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

HPLC/IC

Analysis Batch: 291934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	9056A	
310-190539-2	MW-307A	Total/NA	Water	9056A	
310-190539-3	MW-310A	Total/NA	Water	9056A	
310-190539-4	MW-313A	Total/NA	Water	9056A	
310-190539-5	Field Blank	Total/NA	Water	9056A	
MB 310-291934/3	Method Blank	Total/NA	Water	9056A	
LCS 310-291934/4	Lab Control Sample	Total/NA	Water	9056A	

Metals

Prep Batch: 291712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	3010A	
310-190539-2	MW-307A	Total/NA	Water	3010A	
310-190539-3	MW-310A	Total/NA	Water	3010A	
310-190539-4	MW-313A	Total/NA	Water	3010A	
310-190539-5	Field Blank	Total/NA	Water	3010A	
MB 310-291712/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-291712/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCS 310-291712/2-A ^10	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 291923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	7470A	
310-190539-2	MW-307A	Total/NA	Water	7470A	
310-190539-3	MW-310A	Total/NA	Water	7470A	
310-190539-4	MW-313A	Total/NA	Water	7470A	
310-190539-5	Field Blank	Total/NA	Water	7470A	
MB 310-291923/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-291923/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 292048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	6020A	291712
310-190539-2	MW-307A	Total/NA	Water	6020A	291712
310-190539-3	MW-310A	Total/NA	Water	6020A	291712
310-190539-4	MW-313A	Total/NA	Water	6020A	291712
LCS 310-291712/2-A	Lab Control Sample	Total/NA	Water	6020A	291712
LCS 310-291712/2-A ^10	Lab Control Sample	Total/NA	Water	6020A	291712

Analysis Batch: 292106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	6020A	291712
MB 310-291712/1-A	Method Blank	Total/NA	Water	6020A	291712

Analysis Batch: 292108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	7470A	291923
310-190539-2	MW-307A	Total/NA	Water	7470A	291923
310-190539-3	MW-310A	Total/NA	Water	7470A	291923
310-190539-4	MW-313A	Total/NA	Water	7470A	291923

Eurofins TestAmerica, Cedar Falls

QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Metals (Continued)

Analysis Batch: 292108 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-5	Field Blank	Total/NA	Water	7470A	291923
MB 310-291923/1-A	Method Blank	Total/NA	Water	7470A	291923
LCS 310-291923/2-A	Lab Control Sample	Total/NA	Water	7470A	291923

Analysis Batch: 292364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-5	Field Blank	Total/NA	Water	6020A	291712

General Chemistry

Analysis Batch: 291613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	SM 4500 H+ B	
310-190539-2	MW-307A	Total/NA	Water	SM 4500 H+ B	
310-190539-3	MW-310A	Total/NA	Water	SM 4500 H+ B	
310-190539-4	MW-313A	Total/NA	Water	SM 4500 H+ B	
310-190539-5	Field Blank	Total/NA	Water	SM 4500 H+ B	
LCS 310-291613/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-291613/15	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-291613/16	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-291613/17	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-291613/18	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 291747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	SM 2540C	
310-190539-2	MW-307A	Total/NA	Water	SM 2540C	
310-190539-3	MW-310A	Total/NA	Water	SM 2540C	
310-190539-4	MW-313A	Total/NA	Water	SM 2540C	
310-190539-5	Field Blank	Total/NA	Water	SM 2540C	
MB 310-291747/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-291747/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 291936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	Field Sampling	
310-190539-2	MW-307A	Total/NA	Water	Field Sampling	
310-190539-3	MW-310A	Total/NA	Water	Field Sampling	
310-190539-4	MW-313A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-302A

Lab Sample ID: 310-190539-1

Date Collected: 09/09/20 12:30

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	291934	09/14/20 13:53	CJT	TAL CF
Total/NA	Prep	3010A			291712	09/14/20 08:43	HED	TAL CF
Total/NA	Analysis	6020A		1	292048	09/15/20 13:34	SAD	TAL CF
Total/NA	Prep	3010A			291712	09/14/20 08:43	HED	TAL CF
Total/NA	Analysis	6020A		7	292106	09/16/20 12:11	SAD	TAL CF
Total/NA	Prep	7470A			291923	09/15/20 11:33	ACJ	TAL CF
Total/NA	Analysis	7470A		1	292108	09/16/20 09:46	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	291747	09/14/20 09:58	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	291613	09/11/20 15:18	JNR	TAL CF
Total/NA	Analysis	Field Sampling		1	291936	09/09/20 12:30	ANO	TAL CF

Client Sample ID: MW-307A

Lab Sample ID: 310-190539-2

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	291934	09/14/20 14:09	CJT	TAL CF
Total/NA	Prep	3010A			291712	09/14/20 08:43	HED	TAL CF
Total/NA	Analysis	6020A		1	292048	09/15/20 13:36	SAD	TAL CF
Total/NA	Prep	7470A			291923	09/15/20 11:33	ACJ	TAL CF
Total/NA	Analysis	7470A		1	292108	09/16/20 09:52	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	291747	09/14/20 09:58	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	291613	09/11/20 15:19	JNR	TAL CF
Total/NA	Analysis	Field Sampling		1	291936	09/09/20 10:15	ANO	TAL CF

Client Sample ID: MW-310A

Lab Sample ID: 310-190539-3

Date Collected: 09/09/20 14:50

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	291934	09/14/20 14:24	CJT	TAL CF
Total/NA	Prep	3010A			291712	09/14/20 08:43	HED	TAL CF
Total/NA	Analysis	6020A		1	292048	09/15/20 13:39	SAD	TAL CF
Total/NA	Prep	7470A			291923	09/15/20 11:33	ACJ	TAL CF
Total/NA	Analysis	7470A		1	292108	09/16/20 09:55	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	291747	09/14/20 09:58	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	291613	09/11/20 15:20	JNR	TAL CF
Total/NA	Analysis	Field Sampling		1	291936	09/09/20 14:50	ANO	TAL CF

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Client Sample ID: MW-313A

Lab Sample ID: 310-190539-4

Date Collected: 09/09/20 11:25

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	291934	09/14/20 14:40	CJT	TAL CF
Total/NA	Prep	3010A			291712	09/14/20 08:43	HED	TAL CF
Total/NA	Analysis	6020A		1	292048	09/15/20 13:42	SAD	TAL CF
Total/NA	Prep	7470A			291923	09/15/20 11:33	ACJ	TAL CF
Total/NA	Analysis	7470A		1	292108	09/16/20 09:57	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	291747	09/14/20 09:58	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	291613	09/11/20 15:22	JNR	TAL CF
Total/NA	Analysis	Field Sampling		1	291936	09/09/20 11:25	ANO	TAL CF

Client Sample ID: Field Blank

Lab Sample ID: 310-190539-5

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	291934	09/14/20 14:55	CJT	TAL CF
Total/NA	Prep	3010A			291712	09/14/20 08:43	HED	TAL CF
Total/NA	Analysis	6020A		1	292364	09/17/20 12:44	SAD	TAL CF
Total/NA	Prep	7470A			291923	09/15/20 11:33	ACJ	TAL CF
Total/NA	Analysis	7470A		1	292108	09/16/20 09:59	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	291747	09/14/20 09:58	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	291613	09/11/20 15:29	JNR	TAL CF

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Laboratory: Eurofins TestAmerica, Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-21

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Method Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-1

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	TAL CF
6020A	Metals (ICP/MS)	SW846	TAL CF
7470A	Mercury (CVAA)	SW846	TAL CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CF
SM 4500 H+ B	pH	SM	TAL CF
Field Sampling	Field Sampling	EPA	TAL CF
3010A	Preparation, Total Metals	SW846	TAL CF
7470A	Preparation, Mercury	SW846	TAL CF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Eurofins TestAmerica, Cedar Falls



Environment Testing
TestAmerica



310-190539 Chain of Custody

Cooler/Sample Receipt and Temperature L

Client Information		
Client: <u>SCS Engineers</u>		
City/State: <u>Clive IA</u>	STATE: <u>IA</u>	Project: <u>Burlington Gen Station 25220066</u>
Receipt Information		
Date/Time Received: <u>9/11/20</u> <u>1240</u>	DATE: <u>9/11/20</u>	TIME: <u>1240</u> Received By: <u>JC</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers		
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record		
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID: <u>M</u>	Correction Factor (°C): <u>+0.1</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature		
Uncorrected Temp (°C): <u>0.6</u>	Corrected Temp (°C): <u>0.7</u>	
• Sample Container Temperature		
Container(s) used:	CONTAINER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		
Exceptions Noted		
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No		
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No		
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No		
NOTE: If yes, contact PM before proceeding. If no, proceed with login		
Additional Comments		

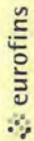
Document: CF-LG-WI-002
Revision: 25
Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

General temperature criteria is 0 to 6°C
Bacteria temperature criteria is 0 to 10°C

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Chain of Custody Record



Client Information Client Contact: <u>Meghan Bledgett</u> Phone: <u>608-250-9985</u> Company: <u>SCS Engineers</u>		Lab PM: <u>Fredrick, Sandie</u> E-Mail: <u>sandra.fredrick@eurofinset.com</u>		Carrier Tracking No(s): COC No: <u>310-52753-16112.1</u> Page: <u>Page 1 of 1</u> Job #:	
Due Date Requested: TAT Requested (days): PO #: <u>25220066</u> WO #: <u>608-224-2830</u> Email: <u>mbledgett@scsengineers.com</u> Project Name: <u>Bledgett's engine room</u> Project #: <u>31011020</u> SOW #:		Analysis Requested Perform MS/MSD (Yes or No)			
Address: <u>8450 Hickman Road Suite 20</u> City: <u>Clive</u> State, Zip: <u>IA, 50325</u> Phone: <u>608-224-2830</u>		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)			
Sample Identification MW-302A MW-307A MW-310A MW-313A FIELD BLANK		Sample Date <u>9/9/2020</u> ↓ ↓ ↓	Sample Time <u>1230</u> <u>1015</u> <u>1450</u> <u>1125</u> <u>1015</u>	Sample Type (C=Comp, G=grab) Preservation Code: Water Water Water Water Water Water	Field Filtered Sample (Yes or No) 6020A - Metals - Hg 2540C - Calcd. 9056A_ORGFM_20D_SM4500_H+ 903.0 - Radium 226 904.0 - Radium 228
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Special Instructions/Note: Total Number of containers			
Deliverable Requested: <input type="checkbox"/> I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by:		Special Instructions/QC Requirements:			
Relinquished by: <u>[Signature]</u> Date/Time: <u>9/10/2020, 1700</u>		Method of Shipment:			
Relinquished by: <u>[Signature]</u> Date/Time:		Received by: <u>[Signature]</u> Date/Time: <u>9-11-20 1240</u>			
Relinquished by:		Received by:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:			

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Table 3. Parameters for Groundwater Monitoring to meet Federal Requirements

Appendix III	Boron
	Calcium
	Chloride
	Fluoride
	pH
	Sulfate
	TDS
Appendix IV	Antimony
	Arsenic
	Barium
	Beryllium
	Cadmium
	Chromium
	Cobalt
	Fluoride
	Lead
	Lithium
	Mercury
	Molybdenum
	Selenium
	Thallium
Radium	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-190539-1

Login Number: 190539

List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1

Creator: Ramos, Eric F

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-190539-2

Client Project/Site: Burlington Gen Station 25220066

For:

SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Attn: Meghan Blodgett



*Authorized for release by:
10/16/2020 8:34:01 AM*

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Job ID: 310-190539-2

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-190539-2

Comments

No additional comments.

Receipt

The samples were received on 9/11/2020 12:40 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7° C.

RAD

Methods 903.0, 9315: Radium Prep Batch: 160-482553 Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-302A (310-190539-1), MW-307A (310-190539-2), MW-310A (310-190539-3), MW-313A (310-190539-4), Field Blank (310-190539-5), (160-39422-E-2-A) and (160-39422-E-2-B DU)

Methods 904.0, 9320: Radium-228 prep batch 160-482555: The following samples did not meet the requested limit (RL) due to the reduced sample volume attributed to the presence of matrix interferences (see prep NCM 160-203715). The data have been reported with this narrative. MW-310A (310-190539-3)

Methods 904.0, 9320: Radium-228 prep batch 160-482555: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. MW-302A (310-190539-1), MW-307A (310-190539-2), MW-310A (310-190539-3), MW-313A (310-190539-4), Field Blank (310-190539-5), (LCS 160-482555/1-A), (MB 160-482555/23-A), (160-39422-E-2-C) and (160-39422-E-2-D DU)

Method PrecSep_0: Radium 228 Prep Batch 160-482555: Samples 310-190539-3, 480-174897-2, 480-174897-3, and 480-174957-2 were prepared at a reduced aliquot due to brown/gray discoloration, a cloudy appearance, and heavy sediment levels: Samples 310-190539-2 and 480-174897-1 were prepared at a reduced aliquot due to yellow discoloration and a cloudy appearance: Sample 240-136378-1 was prepared at a reduced aliquot due to orange discoloration and a cloudy appearance: Samples 240-136378-2, 240-136378-3, 240-136378-4, 240-136378-5, 240-136378-6, 240-136378-7, and 480-174957-3 were prepared at a reduced aliquot due to a cloudy appearance:

Method PrecSep-21: Radium 226 Prep Batch 160-482553: Samples 310-190539-3, 480-174897-2, 480-174897-3, and 480-174957-2 were prepared at a reduced aliquot due to brown/gray discoloration, a cloudy appearance, and heavy sediment levels: Samples 310-190539-2 and 480-174897-1 were prepared at a reduced aliquot due to yellow discoloration and a cloudy appearance: Sample 240-136378-1 was prepared at a reduced aliquot due to orange discoloration and a cloudy appearance: Samples 240-136378-2, 240-136378-3, 240-136378-4, 240-136378-5, 240-136378-6, 240-136378-7, 480-174957-3, and 480-174957-1 were prepared at a reduced aliquot due to a cloudy appearance:

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Sample Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-190539-1	MW-302A	Water	09/09/20 12:30	09/11/20 12:40	
310-190539-2	MW-307A	Water	09/09/20 10:15	09/11/20 12:40	
310-190539-3	MW-310A	Water	09/09/20 14:50	09/11/20 12:40	
310-190539-4	MW-313A	Water	09/09/20 11:25	09/11/20 12:40	
310-190539-5	Field Blank	Water	09/09/20 10:15	09/11/20 12:40	

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Detection Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: MW-302A **Lab Sample ID: 310-190539-1**

No Detections.

Client Sample ID: MW-307A **Lab Sample ID: 310-190539-2**

No Detections.

Client Sample ID: MW-310A **Lab Sample ID: 310-190539-3**

No Detections.

Client Sample ID: MW-313A **Lab Sample ID: 310-190539-4**

No Detections.

Client Sample ID: Field Blank **Lab Sample ID: 310-190539-5**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: MW-302A

Lab Sample ID: 310-190539-1

Date Collected: 09/09/20 12:30

Matrix: Water

Date Received: 09/11/20 12:40

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.421		0.169	0.174	1.00	0.178	pCi/L	09/16/20 08:20	10/08/20 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					09/16/20 08:20	10/08/20 13:22	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.727		0.294	0.301	1.00	0.416	pCi/L	09/16/20 09:04	10/06/20 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					09/16/20 09:04	10/06/20 11:47	1
Y Carrier	86.4		40 - 110					09/16/20 09:04	10/06/20 11:47	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.15		0.339	0.348	5.00	0.416	pCi/L		10/15/20 22:04	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: MW-307A

Lab Sample ID: 310-190539-2

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.168	U	0.155	0.156	1.00	0.234	pCi/L	09/16/20 08:20	10/08/20 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					09/16/20 08:20	10/08/20 13:22	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.438	U	0.354	0.357	1.00	0.561	pCi/L	09/16/20 09:04	10/06/20 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					09/16/20 09:04	10/06/20 11:47	1
Y Carrier	80.0		40 - 110					09/16/20 09:04	10/06/20 11:47	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.605		0.386	0.390	5.00	0.561	pCi/L		10/15/20 22:04	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: MW-310A

Lab Sample ID: 310-190539-3

Date Collected: 09/09/20 14:50

Matrix: Water

Date Received: 09/11/20 12:40

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.48		0.507	0.553	1.00	0.313	pCi/L	09/16/20 08:20	10/12/20 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.4		40 - 110					09/16/20 08:20	10/12/20 11:55	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.44	G	0.955	0.981	1.00	1.34	pCi/L	09/16/20 09:04	10/06/20 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	58.4		40 - 110					09/16/20 09:04	10/06/20 11:47	1
Y Carrier	80.0		40 - 110					09/16/20 09:04	10/06/20 11:47	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	4.91		1.08	1.13	5.00	1.34	pCi/L		10/15/20 22:04	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: MW-313A

Lab Sample ID: 310-190539-4

Date Collected: 09/09/20 11:25

Matrix: Water

Date Received: 09/11/20 12:40

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.513		0.190	0.195	1.00	0.195	pCi/L	09/16/20 08:20	10/08/20 13:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					09/16/20 08:20	10/08/20 13:24	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.984		0.328	0.340	1.00	0.437	pCi/L	09/16/20 09:04	10/06/20 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					09/16/20 09:04	10/06/20 11:47	1
Y Carrier	80.0		40 - 110					09/16/20 09:04	10/06/20 11:47	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.50		0.379	0.392	5.00	0.437	pCi/L		10/15/20 22:04	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: Field Blank

Lab Sample ID: 310-190539-5

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

Method: 903.0 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00942	U	0.0462	0.0462	1.00	0.0942	pCi/L	09/16/20 08:20	10/12/20 11:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					09/16/20 08:20	10/12/20 11:55	1

Method: 904.0 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.172	U	0.346	0.346	1.00	0.645	pCi/L	09/16/20 09:04	10/06/20 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.7		40 - 110					09/16/20 09:04	10/06/20 11:47	1
Y Carrier	53.8		40 - 110					09/16/20 09:04	10/06/20 11:47	1

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.00942	U	0.349	0.349	5.00	0.645	pCi/L		10/15/20 22:04	1



Definitions/Glossary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Method: 903.0 - Radium-226 (GFPC)

Lab Sample ID: MB 160-482553/23-A
Matrix: Water
Analysis Batch: 485202

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482553

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02387	U	0.0675	0.0675	1.00	0.130	pCi/L	09/16/20 08:21	10/09/20 12:44	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110				09/16/20 08:21		10/09/20 12:44	1

Lab Sample ID: LCS 160-482553/1-A
Matrix: Water
Analysis Batch: 485166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482553

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.3	10.35		1.20	1.00	0.230	pCi/L	91	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	84.7		40 - 110						

Method: 904.0 - Radium-228 (GFPC)

Lab Sample ID: MB 160-482555/23-A
Matrix: Water
Analysis Batch: 484998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482555

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.3384	U	0.260	0.261	1.00	0.408	pCi/L	09/16/20 09:04	10/06/20 11:50	1
Carrier	MB %Yield	MB Qualifier	Limits				Prepared		Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110				09/16/20 09:04		10/06/20 11:50	1
Y Carrier	81.9		40 - 110				09/16/20 09:04		10/06/20 11:50	1

Lab Sample ID: LCS 160-482555/1-A
Matrix: Water
Analysis Batch: 485028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482555

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-228	7.76	7.983		0.990	1.00	0.458	pCi/L	103	75 - 125
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	84.7		40 - 110						
Y Carrier	83.7		40 - 110						

Eurofins TestAmerica, Cedar Falls

QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Rad

Prep Batch: 482553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	PrecSep-21	
310-190539-2	MW-307A	Total/NA	Water	PrecSep-21	
310-190539-3	MW-310A	Total/NA	Water	PrecSep-21	
310-190539-4	MW-313A	Total/NA	Water	PrecSep-21	
310-190539-5	Field Blank	Total/NA	Water	PrecSep-21	
MB 160-482553/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-482553/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 482555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-190539-1	MW-302A	Total/NA	Water	PrecSep_0	
310-190539-2	MW-307A	Total/NA	Water	PrecSep_0	
310-190539-3	MW-310A	Total/NA	Water	PrecSep_0	
310-190539-4	MW-313A	Total/NA	Water	PrecSep_0	
310-190539-5	Field Blank	Total/NA	Water	PrecSep_0	
MB 160-482555/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-482555/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: MW-302A

Lab Sample ID: 310-190539-1

Date Collected: 09/09/20 12:30

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482553	09/16/20 08:20	AVB	TAL SL
Total/NA	Analysis	903.0		1	485166	10/08/20 13:22	JLC	TAL SL
Total/NA	Prep	PrecSep_0			482555	09/16/20 09:04	AVB	TAL SL
Total/NA	Analysis	904.0		1	485028	10/06/20 11:47	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	485905	10/15/20 22:04	SCB	TAL SL

Client Sample ID: MW-307A

Lab Sample ID: 310-190539-2

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482553	09/16/20 08:20	AVB	TAL SL
Total/NA	Analysis	903.0		1	485166	10/08/20 13:22	JLC	TAL SL
Total/NA	Prep	PrecSep_0			482555	09/16/20 09:04	AVB	TAL SL
Total/NA	Analysis	904.0		1	485028	10/06/20 11:47	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	485905	10/15/20 22:04	SCB	TAL SL

Client Sample ID: MW-310A

Lab Sample ID: 310-190539-3

Date Collected: 09/09/20 14:50

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482553	09/16/20 08:20	AVB	TAL SL
Total/NA	Analysis	903.0		1	485285	10/12/20 11:55	FLC	TAL SL
Total/NA	Prep	PrecSep_0			482555	09/16/20 09:04	AVB	TAL SL
Total/NA	Analysis	904.0		1	485028	10/06/20 11:47	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	485905	10/15/20 22:04	SCB	TAL SL

Client Sample ID: MW-313A

Lab Sample ID: 310-190539-4

Date Collected: 09/09/20 11:25

Matrix: Water

Date Received: 09/11/20 12:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			482553	09/16/20 08:20	AVB	TAL SL
Total/NA	Analysis	903.0		1	485166	10/08/20 13:24	JLC	TAL SL
Total/NA	Prep	PrecSep_0			482555	09/16/20 09:04	AVB	TAL SL
Total/NA	Analysis	904.0		1	485028	10/06/20 11:47	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	485905	10/15/20 22:04	SCB	TAL SL

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Client Sample ID: Field Blank

Lab Sample ID: 310-190539-5

Date Collected: 09/09/20 10:15

Matrix: Water

Date Received: 09/11/20 12:40

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	PrecSep-21			482553	09/16/20 08:20	AVB	TAL SL
Total/NA	Analysis	903.0		1	485285	10/12/20 11:55	FLC	TAL SL
Total/NA	Prep	PrecSep_0			482555	09/16/20 09:04	AVB	TAL SL
Total/NA	Analysis	904.0		1	485028	10/06/20 11:47	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	485905	10/15/20 22:04	SCB	TAL SL

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

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Accreditation/Certification Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Laboratory: Eurofins TestAmerica, St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
Illinois	NELAP	004553	11-30-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21



Method Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Method	Method Description	Protocol	Laboratory
903.0	Radium-226 (GFPC)	EPA	TAL SL
904.0	Radium-228 (GFPC)	EPA	TAL SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

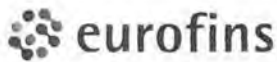
EPA = US Environmental Protection Agency

None = None

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566



Environment Testing
TestAmerica



310-190539 Chain of Custody

Cooler/Sample Receipt and Temperature L

Client Information		
Client: <u>SCS Engineers</u>		
City/State: <u>Clive IA</u>	STATE: <u>IA</u>	Project: <u>Burlington Gen Station 25220066</u>
Receipt Information		
Date/Time Received: <u>9/11/20</u> <u>1240</u>	DATE	TIME
Received By: <u>JC</u>		
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Containers		
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record		
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID: <u>M</u>	Correction Factor (°C): <u>+0.1</u>	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature		
Uncorrected Temp (°C): <u>0.6</u>	Corrected Temp (°C): <u>0.7</u>	
• Sample Container Temperature		
Container(s) used:	CONTAINER 1	CONTAINER 2
Uncorrected Temp (°C):		
Corrected Temp (°C):		
Exceptions Noted		
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No		
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No		
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No		
NOTE: If yes, contact PM before proceeding. If no, proceed with login		
Additional Comments		

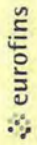
Document: CF-LG-WI-002
Revision: 25
Date: 06/17/2019

Eurofins TestAmerica, Cedar Falls

General temperature criteria is 0 to 6°C
Bacteria temperature criteria is 0 to 10°C

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Chain of Custody Record



Environment Test
America

Client Information
 Client Contact: Meghan Bledgett
 Phone: 608-250-9985
 Company: SCS Engineers
 Address: 8450 Hickman Road Suite 20
 City: Clive
 State, Zip: IA, 50325
 Phone: 608-224-2830
 Email: mbledgett@scsengineers.com
 Project Name: Burlington Gen Station 25220066
 Site: 31011020

Sampler: Adam Watson Lab PM: Fredrick, Sandie
 Phone: 608-250-9985 E-Mail: sandra.fredrick@eurofinset.com

Due Date Requested:
 TAT Requested (days):
 PO #: 25220066
 WO #: 31011020
 Project #: 31011020
 SSO#: 31011020

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code:	Matrix (W=water, S=solid, O=soil, BT=issue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A - Metals - Hg	2540C - Calcd. 9056A_ORGFM_20D_SM4500_H+	903.0 - Radium 226	904.0 - Radium 228	Total Number of containers	Special Instructions/Note:
MW-302A	9/9/2020	1230			Water	X	X	X	X	X	X		
MW-307A		1015			Water	X	X	X	X	X	X		
MW-310A		1450			Water	X	X	X	X	X	X		
MW-313A		1125			Water	X	X	X	X	X	X		
FIELD BLANK		1015			Water	X	X	X	X	X	X		
					Water								

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: _____ Date/Time: 9/10/2020, 1700 Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:

Relinquished by: Debi Flanagan Date/Time: 9-11-20 1240 Company: ETA
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No
 Cooler Temperature(s) °C and Other Remarks:



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Table 3. Parameters for Groundwater Monitoring to meet Federal Requirements

Appendix III	Boron
	Calcium
	Chloride
	Fluoride
	pH
	Sulfate
	TDS
Appendix IV	Antimony
	Arsenic
	Barium
	Beryllium
	Cadmium
	Chromium
	Cobalt
	Fluoride
	Lead
	Lithium
	Mercury
	Molybdenum
	Selenium
	Thallium
Radium	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-190539-2

Login Number: 190539

List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1

Creator: Ramos, Eric F

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-190539-2

Login Number: 190539

List Number: 2

Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis

List Creation: 09/12/20 10:37 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Tracer/Carrier Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station 25220066

Job ID: 310-190539-2

Method: 903.0 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	
310-190539-1	MW-302A	89.0	
310-190539-2	MW-307A	85.0	
310-190539-3	MW-310A	58.4	
310-190539-4	MW-313A	86.9	
310-190539-5	Field Blank	92.7	
LCS 160-482553/1-A	Lab Control Sample	84.7	
MB 160-482553/23-A	Method Blank	87.2	

Tracer/Carrier Legend
Ba = Ba Carrier

Method: 904.0 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
310-190539-1	MW-302A	89.0	86.4
310-190539-2	MW-307A	85.0	80.0
310-190539-3	MW-310A	58.4	80.0
310-190539-4	MW-313A	86.9	80.0
310-190539-5	Field Blank	92.7	53.8
LCS 160-482555/1-A	Lab Control Sample	84.7	83.7
MB 160-482555/23-A	Method Blank	87.2	81.9

Tracer/Carrier Legend
Ba = Ba Carrier
Y = Y Carrier

C3 October 2020 Assessment Monitoring

ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-193402-1
Laboratory Sample Delivery Group: 25220066
Client Project/Site: Burlington Gen Station - 25220066

For:
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Attn: Meghan Blodgett



Authorized for release by:
11/2/2020 3:50:13 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Job ID: 310-193402-1

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-193402-1

Comments

No additional comments.

Receipt

The samples were received on 10/19/2020 4:55 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were -0.6° C, 0.2° C, 0.3° C, 0.8° C, 1.2° C and 2.1° C.

HPLC/IC

Method 9056A: The following samples were diluted due to the nature of the sample matrix: MW-301 (310-193402-1), MW-302 (310-193402-2), MW-302A (310-193402-3), MW-303 (310-193402-4), MW-304 (310-193402-5), MW-305 (310-193402-6), MW-306 (310-193402-7), MW-307 (310-193402-8), MW-307A (310-193402-9), MW-308 (310-193402-10), MW-309 (310-193402-11), MW-310 (310-193402-12), MW-310A (310-193402-13), MW-311 (310-193402-14), MW-312 (310-193402-15), MW-313 (310-193402-16) and MW-313A (310-193402-17). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6020A: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: MW-304 (310-193402-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-193402-1	MW-301	Water	10/16/20 12:47	10/19/20 16:55	
310-193402-2	MW-302	Water	10/16/20 11:25	10/19/20 16:55	
310-193402-3	MW-302A	Water	10/16/20 09:55	10/19/20 16:55	
310-193402-4	MW-303	Water	10/16/20 08:24	10/19/20 16:55	
310-193402-5	MW-304	Water	10/15/20 17:57	10/19/20 16:55	
310-193402-6	MW-305	Water	10/15/20 11:15	10/19/20 16:55	
310-193402-7	MW-306	Water	10/15/20 09:50	10/19/20 16:55	
310-193402-8	MW-307	Water	10/15/20 08:27	10/19/20 16:55	
310-193402-9	MW-307A	Water	10/14/20 17:00	10/19/20 16:55	
310-193402-10	MW-308	Water	10/14/20 15:35	10/19/20 16:55	
310-193402-11	MW-309	Water	10/14/20 14:07	10/19/20 16:55	
310-193402-12	MW-310	Water	10/14/20 11:12	10/19/20 16:55	
310-193402-13	MW-310A	Water	10/16/20 13:50	10/19/20 16:55	
310-193402-14	MW-311	Water	10/14/20 12:35	10/19/20 16:55	
310-193402-15	MW-312	Water	10/15/20 13:08	10/19/20 16:55	
310-193402-16	MW-313	Water	10/15/20 14:27	10/19/20 16:55	
310-193402-17	MW-313A	Water	10/15/20 16:15	10/19/20 16:55	
310-193402-18	Field Blank	Water	10/16/20 13:15	10/19/20 16:55	

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-301

Lab Sample ID: 310-193402-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	170		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	54		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	500		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	12000		1000	800	ug/L	10		6020A	Total/NA
Calcium	220		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.70		0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	10		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	67		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	970		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.8	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.26				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-187.5				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.09				mg/L	1		Field Sampling	Total/NA
pH, Field	7.07				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1503				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	13.7				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	3.41				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-302

Lab Sample ID: 310-193402-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	10		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	460		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	76		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	250		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	11000		1000	800	ug/L	10		6020A	Total/NA
Cadmium	0.11		0.10	0.049	ug/L	1		6020A	Total/NA
Calcium	200		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.26	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lead	0.17	J	0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	64		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	130		2.0	1.1	ug/L	1		6020A	Total/NA
Selenium	1.1	J	5.0	1.0	ug/L	1		6020A	Total/NA
Total Dissolved Solids	910		30	26	mg/L	1		SM 2540C	Total/NA
pH	8.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	518.94				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-237.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.08				mg/L	1		Field Sampling	Total/NA
pH, Field	7.87				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1168				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	12.90				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.07				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-302A

Lab Sample ID: 310-193402-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	23		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	330		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	1.7		1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	2.9		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	280		2.0	0.28	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-302A (Continued)

Lab Sample ID: 310-193402-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	11000		1000	800	ug/L	10		6020A	Total/NA
Cadmium	0.065	J	0.10	0.049	ug/L	1		6020A	Total/NA
Calcium	130		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.11	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	11		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	110		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	710		30	26	mg/L	1		SM 2540C	Total/NA
pH	8.0	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	518.79				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-175.3				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.19				mg/L	1		Field Sampling	Total/NA
pH, Field	7.26				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	951				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	13.10				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	3.82				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-303

Lab Sample ID: 310-193402-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	190		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	0.57	J	1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	14		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	480		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	19000		1000	800	ug/L	10		6020A	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.49	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lead	0.18	J	0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	59		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	84		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	630		30	26	mg/L	1		SM 2540C	Total/NA
pH	8.0	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	518.78				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-185.6				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.12				mg/L	1		Field Sampling	Total/NA
pH, Field	7.19				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	902				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	13.70				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	2.03				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-304

Lab Sample ID: 310-193402-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	420		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	0.52	J	1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	49		8.0	3.5	ug/L	4		6020A	Total/NA
Barium	170		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	7400		400	320	ug/L	4		6020A	Total/NA
Calcium	150		2.0	0.76	mg/L	4		6020A	Total/NA
Lithium	92		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	140		2.0	1.1	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-304 (Continued)

Lab Sample ID: 310-193402-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	820		30	26	mg/L	1		SM 2540C	Total/NA
pH	8.4	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	518.69				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-282.6				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.08				mg/L	1		Field Sampling	Total/NA
pH, Field	8.46				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1062				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.70				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.02				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-305

Lab Sample ID: 310-193402-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	32		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	54		5.0	3.6	mg/L	5		9056A	Total/NA
Barium	250		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	2400		100	80	ug/L	1		6020A	Total/NA
Calcium	120		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.15	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	34		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	1.1	J	2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	600		30	26	mg/L	1		SM 2540C	Total/NA
pH	8.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.00				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-175.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.37				mg/L	1		Field Sampling	Total/NA
pH, Field	7.23				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	987				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.60				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.02				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-306

Lab Sample ID: 310-193402-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	71		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	0.90	J	1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	46		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	16		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	3200		200	160	ug/L	2		6020A	Total/NA
Calcium	37		0.50	0.19	mg/L	1		6020A	Total/NA
Lead	0.43	J	0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	42		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	82		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	300		30	26	mg/L	1		SM 2540C	Total/NA
pH	9.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.05				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-273.7				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.11				mg/L	1		Field Sampling	Total/NA
pH, Field	10.00				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	453.7				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.10				Degrees C	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-306 (Continued)

Lab Sample ID: 310-193402-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Turbidity, Field	0.02				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-307

Lab Sample ID: 310-193402-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	160		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	0.56	J	1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	47		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	39		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	3400		200	160	ug/L	2		6020A	Total/NA
Calcium	36		0.50	0.19	mg/L	1		6020A	Total/NA
Lead	0.19	J	0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	51		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	140		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	370		30	26	mg/L	1		SM 2540C	Total/NA
pH	9.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.33				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-269.7				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.11				mg/L	1		Field Sampling	Total/NA
pH, Field	10.05				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	564.8				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.00				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.02				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-307A

Lab Sample ID: 310-193402-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	31		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	110		5.0	3.6	mg/L	5		9056A	Total/NA
Barium	47		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	4100		200	160	ug/L	2		6020A	Total/NA
Cadmium	0.052	J	0.10	0.049	ug/L	1		6020A	Total/NA
Calcium	11		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.15	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lead	0.63		0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	8.3	J	10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	360		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.9	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.00				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-189.9				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.18				mg/L	1		Field Sampling	Total/NA
pH, Field	7.80				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	553.6				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.60				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	2.96				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-308

Lab Sample ID: 310-193402-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	45		5.0	2.0	mg/L	5		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-308 (Continued)

Lab Sample ID: 310-193402-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	160		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	69		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	74		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	4500		200	160	ug/L	2		6020A	Total/NA
Calcium	37		0.50	0.19	mg/L	1		6020A	Total/NA
Lead	0.15	J	0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	51		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	110		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	460		30	26	mg/L	1		SM 2540C	Total/NA
pH	9.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.02				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-264.6				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.10				mg/L	1		Field Sampling	Total/NA
pH, Field	9.70				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	682				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.70				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.15				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-309

Lab Sample ID: 310-193402-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	64		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	160		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	33		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	220		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	4400		200	160	ug/L	2		6020A	Total/NA
Calcium	59		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.33	J	0.50	0.091	ug/L	1		6020A	Total/NA
Molybdenum	100		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	550		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	519.28				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-208.4				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.14				mg/L	1		Field Sampling	Total/NA
pH, Field	7.61				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	851				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.30				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	18.9				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-310

Lab Sample ID: 310-193402-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	19		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	1.9		1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	63		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	400		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	290		100	80	ug/L	1		6020A	Total/NA
Calcium	92		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	1.5		0.50	0.091	ug/L	1		6020A	Total/NA
Molybdenum	3.6		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	390		30	26	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-310 (Continued)

Lab Sample ID: 310-193402-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	523.81				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-223.6				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.08				mg/L	1		Field Sampling	Total/NA
pH, Field	7.34				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	711				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	16.40				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	3.79				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-310A

Lab Sample ID: 310-193402-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	16		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	130		5.0	3.6	mg/L	5		9056A	Total/NA
Antimony	1.5		1.0	0.51	ug/L	1		6020A	Total/NA
Arsenic	5.1		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	90		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	1200		100	80	ug/L	1		6020A	Total/NA
Cadmium	0.062	J	0.10	0.049	ug/L	1		6020A	Total/NA
Calcium	62		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	3.4		0.50	0.091	ug/L	1		6020A	Total/NA
Lead	3.5		0.50	0.11	ug/L	1		6020A	Total/NA
Lithium	36		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	33		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	620		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.6	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	489.84				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	NA				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	NA				mg/L	1		Field Sampling	Total/NA
pH, Field	NA				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	NA				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	NA				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	NA				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-311

Lab Sample ID: 310-193402-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	61		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	110		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	15		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	220		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	3500		100	80	ug/L	1		6020A	Total/NA
Calcium	140		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.28	J	0.50	0.091	ug/L	1		6020A	Total/NA
Molybdenum	23		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	640		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.1	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	520.59				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-194.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.10				mg/L	1		Field Sampling	Total/NA
pH, Field	7.41				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1041				umhos/cm	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Client Sample ID: MW-311 (Continued)

Lab Sample ID: 310-193402-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Temperature, Field	14.50				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	2.36				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-312

Lab Sample ID: 310-193402-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	23		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	210		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	19		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	200		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	6500		400	320	ug/L	4		6020A	Total/NA
Cadmium	0.066	J	0.10	0.049	ug/L	1		6020A	Total/NA
Calcium	78		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.50		0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	27		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	290		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	560		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	518.68				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-203.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.13				mg/L	1		Field Sampling	Total/NA
pH, Field	7.37				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	854				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	15.1				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.02				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-313

Lab Sample ID: 310-193402-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	50		5.0	2.0	mg/L	5		9056A	Total/NA
Sulfate	170		5.0	3.6	mg/L	5		9056A	Total/NA
Arsenic	5.5		2.0	0.88	ug/L	1		6020A	Total/NA
Barium	610		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	7600		400	320	ug/L	4		6020A	Total/NA
Calcium	110		0.50	0.19	mg/L	1		6020A	Total/NA
Cobalt	0.19	J	0.50	0.091	ug/L	1		6020A	Total/NA
Lithium	51		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	100		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	640		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.2	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	518.70				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-183.3				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.14				mg/L	1		Field Sampling	Total/NA
pH, Field	7.16				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	999				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	15.3				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	14.3				NTU	1		Field Sampling	Total/NA

Client Sample ID: MW-313A

Lab Sample ID: 310-193402-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	200		5.0	2.0	mg/L	5		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-313A (Continued)

Lab Sample ID: 310-193402-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	190		5.0	3.6	mg/L	5		9056A	Total/NA
Barium	270		2.0	0.28	ug/L	1		6020A	Total/NA
Boron	4200		200	160	ug/L	2		6020A	Total/NA
Calcium	44		0.50	0.19	mg/L	1		6020A	Total/NA
Lithium	13		10	2.5	ug/L	1		6020A	Total/NA
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Total/NA
Total Dissolved Solids	660		30	26	mg/L	1		SM 2540C	Total/NA
pH	7.5	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA
Ground Water Elevation	518.61				ft	1		Field Sampling	Total/NA
Oxidation Reduction Potential	-190.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved, Client Supplied	0.10				mg/L	1		Field Sampling	Total/NA
pH, Field	7.64				SU	1		Field Sampling	Total/NA
Specific Conductance, Field	1133				umhos/cm	1		Field Sampling	Total/NA
Temperature, Field	14.8				Degrees C	1		Field Sampling	Total/NA
Turbidity, Field	0.02				NTU	1		Field Sampling	Total/NA

Client Sample ID: Field Blank

Lab Sample ID: 310-193402-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.29	J	2.0	0.28	ug/L	1		6020A	Total/NA
pH	5.9	HF	0.1	0.1	SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-301

Lab Sample ID: 310-193402-1

Date Collected: 10/16/20 12:47

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		5.0	2.0	mg/L			10/24/20 08:08	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 08:08	5
Sulfate	170		5.0	3.6	mg/L			10/24/20 08:08	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 19:42	1
Arsenic	54		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 19:42	1
Barium	500		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 19:42	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 19:42	1
Boron	12000		1000	800	ug/L		10/20/20 08:42	10/29/20 13:10	10
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 19:42	1
Calcium	220		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 19:42	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 19:42	1
Cobalt	0.70		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 19:42	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 19:42	1
Lithium	10		10	2.5	ug/L		10/20/20 08:42	10/28/20 19:42	1
Molybdenum	67		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 19:42	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 19:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/24/20 09:00	10/26/20 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	970		30	26	mg/L			10/20/20 15:13	1
pH	7.8	HF	0.1	0.1	SU			10/20/20 03:26	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.26				ft			10/16/20 12:47	1
Oxidation Reduction Potential	-187.5				millivolts			10/16/20 12:47	1
Oxygen, Dissolved, Client Supplied	0.09				mg/L			10/16/20 12:47	1
pH, Field	7.07				SU			10/16/20 12:47	1
Specific Conductance, Field	1503				umhos/cm			10/16/20 12:47	1
Temperature, Field	13.7				Degrees C			10/16/20 12:47	1
Turbidity, Field	3.41				NTU			10/16/20 12:47	1

Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Client Sample ID: MW-302

Lab Sample ID: 310-193402-2

Date Collected: 10/16/20 11:25

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10		5.0	2.0	mg/L			10/24/20 08:55	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 08:55	5
Sulfate	460		5.0	3.6	mg/L			10/24/20 08:55	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 19:53	1
Arsenic	76		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 19:53	1
Barium	250		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 19:53	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 19:53	1
Boron	11000		1000	800	ug/L		10/20/20 08:42	10/29/20 13:29	10
Cadmium	0.11		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 19:53	1
Calcium	200		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 19:53	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 19:53	1
Cobalt	0.26	J	0.50	0.091	ug/L		10/20/20 08:42	10/28/20 19:53	1
Lead	0.17	J	0.50	0.11	ug/L		10/20/20 08:42	10/28/20 19:53	1
Lithium	64		10	2.5	ug/L		10/20/20 08:42	10/28/20 19:53	1
Molybdenum	130		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 19:53	1
Selenium	1.1	J	5.0	1.0	ug/L		10/20/20 08:42	10/28/20 19:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	910		30	26	mg/L			10/20/20 15:13	1
pH	8.2	HF	0.1	0.1	SU			10/20/20 03:27	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	518.94				ft			10/16/20 11:25	1
Oxidation Reduction Potential	-237.1				millivolts			10/16/20 11:25	1
Oxygen, Dissolved, Client Supplied	0.08				mg/L			10/16/20 11:25	1
pH, Field	7.87				SU			10/16/20 11:25	1
Specific Conductance, Field	1168				umhos/cm			10/16/20 11:25	1
Temperature, Field	12.90				Degrees C			10/16/20 11:25	1
Turbidity, Field	0.07				NTU			10/16/20 11:25	1

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-302A

Lab Sample ID: 310-193402-3

Date Collected: 10/16/20 09:55

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		5.0	2.0	mg/L			10/24/20 09:10	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 09:10	5
Sulfate	330		5.0	3.6	mg/L			10/24/20 09:10	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.7		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:06	1
Arsenic	2.9		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:06	1
Barium	280		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:06	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:06	1
Boron	11000		1000	800	ug/L		10/20/20 08:42	10/29/20 13:31	10
Cadmium	0.065	J	0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:06	1
Calcium	130		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:06	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:06	1
Cobalt	0.11	J	0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:06	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:06	1
Lithium	11		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:06	1
Molybdenum	110		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:06	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	710		30	26	mg/L			10/21/20 16:44	1
pH	8.0	HF	0.1	0.1	SU			10/20/20 03:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	518.79				ft			10/16/20 09:55	1
Oxidation Reduction Potential	-175.3				millivolts			10/16/20 09:55	1
Oxygen, Dissolved, Client Supplied	0.19				mg/L			10/16/20 09:55	1
pH, Field	7.26				SU			10/16/20 09:55	1
Specific Conductance, Field	951				umhos/cm			10/16/20 09:55	1
Temperature, Field	13.10				Degrees C			10/16/20 09:55	1
Turbidity, Field	3.82				NTU			10/16/20 09:55	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-303
Date Collected: 10/16/20 08:24
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-4
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		5.0	2.0	mg/L			10/24/20 09:57	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 09:57	5
Sulfate	190		5.0	3.6	mg/L			10/24/20 09:57	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.57	J	1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:08	1
Arsenic	14		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:08	1
Barium	480		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:08	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:08	1
Boron	19000		1000	800	ug/L		10/20/20 08:42	10/29/20 13:34	10
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:08	1
Calcium	120		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:08	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:08	1
Cobalt	0.49	J	0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:08	1
Lead	0.18	J	0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:08	1
Lithium	59		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:08	1
Molybdenum	84		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:08	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	630		30	26	mg/L			10/21/20 16:44	1
pH	8.0	HF	0.1	0.1	SU			10/20/20 03:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	518.78				ft			10/16/20 08:24	1
Oxidation Reduction Potential	-185.6				millivolts			10/16/20 08:24	1
Oxygen, Dissolved, Client Supplied	0.12				mg/L			10/16/20 08:24	1
pH, Field	7.19				SU			10/16/20 08:24	1
Specific Conductance, Field	902				umhos/cm			10/16/20 08:24	1
Temperature, Field	13.70				Degrees C			10/16/20 08:24	1
Turbidity, Field	2.03				NTU			10/16/20 08:24	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-304
Date Collected: 10/15/20 17:57
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-5
Matrix: Water

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		5.0	2.0	mg/L			10/24/20 10:13	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 10:13	5
Sulfate	420		5.0	3.6	mg/L			10/24/20 10:13	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.52	J	1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:11	1
Arsenic	49		8.0	3.5	ug/L		10/20/20 08:42	10/29/20 13:37	4
Barium	170		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:11	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:11	1
Boron	7400		400	320	ug/L		10/20/20 08:42	10/29/20 13:37	4
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:11	1
Calcium	150		2.0	0.76	mg/L		10/20/20 08:42	10/29/20 13:37	4
Chromium	<4.4		20	4.4	ug/L		10/20/20 08:42	10/29/20 13:37	4
Cobalt	<0.36		2.0	0.36	ug/L		10/20/20 08:42	10/29/20 13:37	4
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:11	1
Lithium	92		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:11	1
Molybdenum	140		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:11	1
Selenium	<4.0		20	4.0	ug/L		10/20/20 08:42	10/29/20 13:37	4

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	820		30	26	mg/L			10/21/20 16:44	1
pH	8.4	HF	0.1	0.1	SU			10/20/20 03:31	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	518.69				ft			10/15/20 17:57	1
Oxidation Reduction Potential	-282.6				millivolts			10/15/20 17:57	1
Oxygen, Dissolved, Client Supplied	0.08				mg/L			10/15/20 17:57	1
pH, Field	8.46				SU			10/15/20 17:57	1
Specific Conductance, Field	1062				umhos/cm			10/15/20 17:57	1
Temperature, Field	14.70				Degrees C			10/15/20 17:57	1
Turbidity, Field	0.02				NTU			10/15/20 17:57	1

Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Client Sample ID: MW-305

Lab Sample ID: 310-193402-6

Date Collected: 10/15/20 11:15

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32		5.0	2.0	mg/L			10/24/20 10:28	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 10:28	5
Sulfate	54		5.0	3.6	mg/L			10/24/20 10:28	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:13	1
Arsenic	<0.88		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:13	1
Barium	250		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:13	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:13	1
Boron	2400		100	80	ug/L		10/20/20 08:42	10/29/20 13:39	1
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:13	1
Calcium	120		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:13	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:13	1
Cobalt	0.15	J	0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:13	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:13	1
Lithium	34		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:13	1
Molybdenum	1.1	J	2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:13	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	600		30	26	mg/L			10/21/20 16:44	1
pH	8.1	HF	0.1	0.1	SU			10/20/20 03:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.00				ft			10/15/20 11:15	1
Oxidation Reduction Potential	-175.0				millivolts			10/15/20 11:15	1
Oxygen, Dissolved, Client Supplied	0.37				mg/L			10/15/20 11:15	1
pH, Field	7.23				SU			10/15/20 11:15	1
Specific Conductance, Field	987				umhos/cm			10/15/20 11:15	1
Temperature, Field	14.60				Degrees C			10/15/20 11:15	1
Turbidity, Field	0.02				NTU			10/15/20 11:15	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-306

Lab Sample ID: 310-193402-7

Date Collected: 10/15/20 09:50

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		5.0	2.0	mg/L			10/24/20 10:44	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 10:44	5
Sulfate	71		5.0	3.6	mg/L			10/24/20 10:44	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.90	J	1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:16	1
Arsenic	46		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:16	1
Barium	16		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:16	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:16	1
Boron	3200		200	160	ug/L		10/20/20 08:42	10/29/20 13:42	2
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:16	1
Calcium	37		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:16	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:16	1
Cobalt	<0.091		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:16	1
Lead	0.43	J	0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:16	1
Lithium	42		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:16	1
Molybdenum	82		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:16	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	300		30	26	mg/L			10/21/20 16:44	1
pH	9.6	HF	0.1	0.1	SU			10/20/20 03:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.05				ft			10/15/20 09:50	1
Oxidation Reduction Potential	-273.7				millivolts			10/15/20 09:50	1
Oxygen, Dissolved, Client Supplied	0.11				mg/L			10/15/20 09:50	1
pH, Field	10.00				SU			10/15/20 09:50	1
Specific Conductance, Field	453.7				umhos/cm			10/15/20 09:50	1
Temperature, Field	14.10				Degrees C			10/15/20 09:50	1
Turbidity, Field	0.02				NTU			10/15/20 09:50	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-307

Lab Sample ID: 310-193402-8

Date Collected: 10/15/20 08:27

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		5.0	2.0	mg/L			10/24/20 10:59	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 10:59	5
Sulfate	160		5.0	3.6	mg/L			10/24/20 10:59	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.56	J	1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:19	1
Arsenic	47		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:19	1
Barium	39		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:19	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:19	1
Boron	3400		200	160	ug/L		10/20/20 08:42	10/29/20 13:45	2
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:19	1
Calcium	36		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:19	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:19	1
Cobalt	<0.091		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:19	1
Lead	0.19	J	0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:19	1
Lithium	51		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:19	1
Molybdenum	140		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:19	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		30	26	mg/L			10/21/20 16:44	1
pH	9.5	HF	0.1	0.1	SU			10/20/20 03:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.33				ft			10/15/20 08:27	1
Oxidation Reduction Potential	-269.7				millivolts			10/15/20 08:27	1
Oxygen, Dissolved, Client Supplied	0.11				mg/L			10/15/20 08:27	1
pH, Field	10.05				SU			10/15/20 08:27	1
Specific Conductance, Field	564.8				umhos/cm			10/15/20 08:27	1
Temperature, Field	14.00				Degrees C			10/15/20 08:27	1
Turbidity, Field	0.02				NTU			10/15/20 08:27	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-307A

Lab Sample ID: 310-193402-9

Date Collected: 10/14/20 17:00

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31		5.0	2.0	mg/L			10/24/20 11:24	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 11:24	5
Sulfate	110		5.0	3.6	mg/L			10/24/20 11:24	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:21	1
Arsenic	<0.88		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:21	1
Barium	47		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:21	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:21	1
Boron	4100		200	160	ug/L		10/20/20 08:42	10/29/20 13:47	2
Cadmium	0.052	J	0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:21	1
Calcium	11		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:21	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:21	1
Cobalt	0.15	J	0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:21	1
Lead	0.63		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:21	1
Lithium	8.3	J	10	2.5	ug/L		10/20/20 08:42	10/28/20 20:21	1
Molybdenum	120		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:21	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	360		30	26	mg/L			10/20/20 15:13	1
pH	7.9	HF	0.1	0.1	SU			10/20/20 03:43	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.00				ft			10/14/20 17:00	1
Oxidation Reduction Potential	-189.9				millivolts			10/14/20 17:00	1
Oxygen, Dissolved, Client Supplied	0.18				mg/L			10/14/20 17:00	1
pH, Field	7.80				SU			10/14/20 17:00	1
Specific Conductance, Field	553.6				umhos/cm			10/14/20 17:00	1
Temperature, Field	14.60				Degrees C			10/14/20 17:00	1
Turbidity, Field	2.96				NTU			10/14/20 17:00	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-308

Lab Sample ID: 310-193402-10

Date Collected: 10/14/20 15:35

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45		5.0	2.0	mg/L			10/24/20 11:40	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 11:40	5
Sulfate	160		5.0	3.6	mg/L			10/24/20 11:40	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:24	1
Arsenic	69		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:24	1
Barium	74		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:24	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:24	1
Boron	4500		200	160	ug/L		10/20/20 08:42	10/29/20 13:50	2
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:24	1
Calcium	37		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:24	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:24	1
Cobalt	<0.091		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:24	1
Lead	0.15	J	0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:24	1
Lithium	51		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:24	1
Molybdenum	110		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:24	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	460		30	26	mg/L			10/20/20 15:13	1
pH	9.6	HF	0.1	0.1	SU			10/20/20 03:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.02				ft			10/14/20 15:35	1
Oxidation Reduction Potential	-264.6				millivolts			10/14/20 15:35	1
Oxygen, Dissolved, Client Supplied	0.10				mg/L			10/14/20 15:35	1
pH, Field	9.70				SU			10/14/20 15:35	1
Specific Conductance, Field	682				umhos/cm			10/14/20 15:35	1
Temperature, Field	14.70				Degrees C			10/14/20 15:35	1
Turbidity, Field	0.15				NTU			10/14/20 15:35	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-309

Lab Sample ID: 310-193402-11

Date Collected: 10/14/20 14:07

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64		5.0	2.0	mg/L			10/24/20 11:55	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 11:55	5
Sulfate	160		5.0	3.6	mg/L			10/24/20 11:55	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:27	1
Arsenic	33		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:27	1
Barium	220		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:27	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:27	1
Boron	4400		200	160	ug/L		10/20/20 08:42	10/29/20 14:03	2
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:27	1
Calcium	59		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:27	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:27	1
Cobalt	0.33 J		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:27	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:27	1
Lithium	<2.5		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:27	1
Molybdenum	100		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:27	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	550		30	26	mg/L			10/20/20 15:13	1
pH	7.2	HF	0.1	0.1	SU			10/20/20 03:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	519.28				ft			10/14/20 14:07	1
Oxidation Reduction Potential	-208.4				millivolts			10/14/20 14:07	1
Oxygen, Dissolved, Client Supplied	0.14				mg/L			10/14/20 14:07	1
pH, Field	7.61				SU			10/14/20 14:07	1
Specific Conductance, Field	851				umhos/cm			10/14/20 14:07	1
Temperature, Field	14.30				Degrees C			10/14/20 14:07	1
Turbidity, Field	18.9				NTU			10/14/20 14:07	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-310

Lab Sample ID: 310-193402-12

Date Collected: 10/14/20 11:12

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		5.0	2.0	mg/L			10/24/20 12:11	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 12:11	5
Sulfate	19		5.0	3.6	mg/L			10/24/20 12:11	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.9		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:42	1
Arsenic	63		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:42	1
Barium	400		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:42	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:42	1
Boron	290		100	80	ug/L		10/20/20 08:42	10/29/20 14:08	1
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:42	1
Calcium	92		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:42	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:42	1
Cobalt	1.5		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:42	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:42	1
Lithium	<2.5		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:42	1
Molybdenum	3.6		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:42	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	390		30	26	mg/L			10/20/20 15:13	1
pH	7.2	HF	0.1	0.1	SU			10/20/20 03:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	523.81				ft			10/14/20 11:12	1
Oxidation Reduction Potential	-223.6				millivolts			10/14/20 11:12	1
Oxygen, Dissolved, Client Supplied	0.08				mg/L			10/14/20 11:12	1
pH, Field	7.34				SU			10/14/20 11:12	1
Specific Conductance, Field	711				umhos/cm			10/14/20 11:12	1
Temperature, Field	16.40				Degrees C			10/14/20 11:12	1
Turbidity, Field	3.79				NTU			10/14/20 11:12	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-310A

Lab Sample ID: 310-193402-13

Date Collected: 10/16/20 13:50

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		5.0	2.0	mg/L			10/24/20 12:26	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 12:26	5
Sulfate	130		5.0	3.6	mg/L			10/24/20 12:26	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:45	1
Arsenic	5.1		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:45	1
Barium	90		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:45	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:45	1
Boron	1200		100	80	ug/L		10/20/20 08:42	10/29/20 14:11	1
Cadmium	0.062	J	0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:45	1
Calcium	62		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:45	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:45	1
Cobalt	3.4		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:45	1
Lead	3.5		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:45	1
Lithium	36		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:45	1
Molybdenum	33		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:45	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	620		30	26	mg/L			10/21/20 16:44	1
pH	7.6	HF	0.1	0.1	SU			10/20/20 03:49	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	489.84				ft			10/16/20 13:50	1
Oxidation Reduction Potential	NA				millivolts			10/16/20 13:50	1
Oxygen, Dissolved, Client Supplied	NA				mg/L			10/16/20 13:50	1
pH, Field	NA				SU			10/16/20 13:50	1
Specific Conductance, Field	NA				umhos/cm			10/16/20 13:50	1
Temperature, Field	NA				Degrees C			10/16/20 13:50	1
Turbidity, Field	NA				NTU			10/16/20 13:50	1



Client Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Client Sample ID: MW-311

Lab Sample ID: 310-193402-14

Date Collected: 10/14/20 12:35

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61		5.0	2.0	mg/L			10/24/20 13:13	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 13:13	5
Sulfate	110		5.0	3.6	mg/L			10/24/20 13:13	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:48	1
Arsenic	15		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:48	1
Barium	220		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:48	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:48	1
Boron	3500		100	80	ug/L		10/20/20 08:42	10/29/20 14:14	1
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:48	1
Calcium	140		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:48	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:48	1
Cobalt	0.28 J		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:48	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:48	1
Lithium	<2.5		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:48	1
Molybdenum	23		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:48	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	640		30	26	mg/L			10/20/20 15:13	1
pH	7.1	HF	0.1	0.1	SU			10/20/20 03:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	520.59				ft			10/14/20 12:35	1
Oxidation Reduction Potential	-194.0				millivolts			10/14/20 12:35	1
Oxygen, Dissolved, Client Supplied	0.10				mg/L			10/14/20 12:35	1
pH, Field	7.41				SU			10/14/20 12:35	1
Specific Conductance, Field	1041				umhos/cm			10/14/20 12:35	1
Temperature, Field	14.50				Degrees C			10/14/20 12:35	1
Turbidity, Field	2.36				NTU			10/14/20 12:35	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-312

Lab Sample ID: 310-193402-15

Date Collected: 10/15/20 13:08

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		5.0	2.0	mg/L			10/24/20 13:29	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 13:29	5
Sulfate	210		5.0	3.6	mg/L			10/24/20 13:29	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:50	1
Arsenic	19		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:50	1
Barium	200		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:50	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:50	1
Boron	6500		400	320	ug/L		10/20/20 08:42	10/29/20 14:16	4
Cadmium	0.066	J	0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:50	1
Calcium	78		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:50	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:50	1
Cobalt	0.50		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:50	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:50	1
Lithium	27		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:50	1
Molybdenum	290		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:50	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	560		30	26	mg/L			10/21/20 16:44	1
pH	7.2	HF	0.1	0.1	SU			10/20/20 03:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	518.68				ft			10/15/20 13:08	1
Oxidation Reduction Potential	-203.1				millivolts			10/15/20 13:08	1
Oxygen, Dissolved, Client Supplied	0.13				mg/L			10/15/20 13:08	1
pH, Field	7.37				SU			10/15/20 13:08	1
Specific Conductance, Field	854				umhos/cm			10/15/20 13:08	1
Temperature, Field	15.1				Degrees C			10/15/20 13:08	1
Turbidity, Field	0.02				NTU			10/15/20 13:08	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-313

Lab Sample ID: 310-193402-16

Date Collected: 10/15/20 14:27

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50		5.0	2.0	mg/L			10/24/20 13:55	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 13:55	5
Sulfate	170		5.0	3.6	mg/L			10/24/20 13:55	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:53	1
Arsenic	5.5		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:53	1
Barium	610		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:53	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:53	1
Boron	7600		400	320	ug/L		10/20/20 08:42	10/29/20 14:19	4
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:53	1
Calcium	110		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:53	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:53	1
Cobalt	0.19 J		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:53	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:53	1
Lithium	51		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:53	1
Molybdenum	100		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:53	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:53	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 10:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	640		30	26	mg/L			10/21/20 16:44	1
pH	7.2	HF	0.1	0.1	SU			10/20/20 03:57	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	518.70				ft			10/15/20 14:27	1
Oxidation Reduction Potential	-183.3				millivolts			10/15/20 14:27	1
Oxygen, Dissolved, Client Supplied	0.14				mg/L			10/15/20 14:27	1
pH, Field	7.16				SU			10/15/20 14:27	1
Specific Conductance, Field	999				umhos/cm			10/15/20 14:27	1
Temperature, Field	15.3				Degrees C			10/15/20 14:27	1
Turbidity, Field	14.3				NTU			10/15/20 14:27	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-313A

Lab Sample ID: 310-193402-17

Date Collected: 10/15/20 16:15

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		5.0	2.0	mg/L			10/24/20 14:00	5
Fluoride	<0.23		0.50	0.23	mg/L			10/24/20 14:00	5
Sulfate	190		5.0	3.6	mg/L			10/24/20 14:00	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:55	1
Arsenic	<0.88		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:55	1
Barium	270		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:55	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:55	1
Boron	4200		200	160	ug/L		10/20/20 08:42	10/29/20 14:21	2
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:55	1
Calcium	44		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:55	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:55	1
Cobalt	<0.091		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:55	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:55	1
Lithium	13		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:55	1
Molybdenum	120		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:55	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 10:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	660		30	26	mg/L			10/21/20 16:44	1
pH	7.5	HF	0.1	0.1	SU			10/20/20 03:59	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ground Water Elevation	518.61				ft			10/15/20 16:15	1
Oxidation Reduction Potential	-190.1				millivolts			10/15/20 16:15	1
Oxygen, Dissolved, Client Supplied	0.10				mg/L			10/15/20 16:15	1
pH, Field	7.64				SU			10/15/20 16:15	1
Specific Conductance, Field	1133				umhos/cm			10/15/20 16:15	1
Temperature, Field	14.8				Degrees C			10/15/20 16:15	1
Turbidity, Field	0.02				NTU			10/15/20 16:15	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: Field Blank

Lab Sample ID: 310-193402-18

Date Collected: 10/16/20 13:15

Matrix: Water

Date Received: 10/19/20 16:55

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		1.0	0.40	mg/L			10/24/20 14:16	1
Fluoride	<0.046		0.10	0.046	mg/L			10/24/20 14:16	1
Sulfate	<0.71		1.0	0.71	mg/L			10/24/20 14:16	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 20:58	1
Arsenic	<0.88		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 20:58	1
Barium	0.29	J	2.0	0.28	ug/L		10/20/20 08:42	10/28/20 20:58	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 20:58	1
Boron	<80		100	80	ug/L		10/20/20 08:42	10/29/20 14:24	1
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 20:58	1
Calcium	<0.19		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 20:58	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:58	1
Cobalt	<0.091		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 20:58	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 20:58	1
Lithium	<2.5		10	2.5	ug/L		10/20/20 08:42	10/28/20 20:58	1
Molybdenum	<1.1		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 20:58	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 20:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 10:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			10/22/20 15:01	1
pH	5.9	HF	0.1	0.1	SU			10/20/20 04:01	1

Definitions/Glossary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 310-297035/3
Matrix: Water
Analysis Batch: 297035

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.40		1.0	0.40	mg/L			10/24/20 07:37	1
Fluoride	<0.046		0.10	0.046	mg/L			10/24/20 07:37	1
Sulfate	<0.71		1.0	0.71	mg/L			10/24/20 07:37	1

Lab Sample ID: LCS 310-297035/4
Matrix: Water
Analysis Batch: 297035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.79		mg/L		98	90 - 110
Fluoride	2.00	1.95		mg/L		97	90 - 110
Sulfate	10.0	9.99		mg/L		100	90 - 110

Lab Sample ID: 310-193402-1 MS
Matrix: Water
Analysis Batch: 297035

Client Sample ID: MW-301
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	20		25.0	43.7		mg/L		96	80 - 120
Fluoride	<0.23		5.00	4.81		mg/L		96	80 - 120
Sulfate	170		25.0	195	4	mg/L		85	80 - 120

Lab Sample ID: 310-193402-1 MSD
Matrix: Water
Analysis Batch: 297035

Client Sample ID: MW-301
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	20		25.0	43.8		mg/L		97	80 - 120	0	15
Fluoride	<0.23		5.00	5.44		mg/L		109	80 - 120	12	15
Sulfate	170		25.0	195	4	mg/L		84	80 - 120	0	15

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 310-296240/1-A
Matrix: Water
Analysis Batch: 297469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.51		1.0	0.51	ug/L		10/20/20 08:42	10/28/20 19:35	1
Arsenic	<0.88		2.0	0.88	ug/L		10/20/20 08:42	10/28/20 19:35	1
Barium	<0.28		2.0	0.28	ug/L		10/20/20 08:42	10/28/20 19:35	1
Beryllium	<0.27		1.0	0.27	ug/L		10/20/20 08:42	10/28/20 19:35	1
Cadmium	<0.049		0.10	0.049	ug/L		10/20/20 08:42	10/28/20 19:35	1
Calcium	<0.19		0.50	0.19	mg/L		10/20/20 08:42	10/28/20 19:35	1
Chromium	<1.1		5.0	1.1	ug/L		10/20/20 08:42	10/28/20 19:35	1
Cobalt	<0.091		0.50	0.091	ug/L		10/20/20 08:42	10/28/20 19:35	1
Lead	<0.11		0.50	0.11	ug/L		10/20/20 08:42	10/28/20 19:35	1
Lithium	<2.5		10	2.5	ug/L		10/20/20 08:42	10/28/20 19:35	1
Molybdenum	<1.1		2.0	1.1	ug/L		10/20/20 08:42	10/28/20 19:35	1
Selenium	<1.0		5.0	1.0	ug/L		10/20/20 08:42	10/28/20 19:35	1

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QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 310-296240/1-A
Matrix: Water
Analysis Batch: 297560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<80		100	80	ug/L		10/20/20 08:42	10/29/20 13:05	1

Lab Sample ID: LCS 310-296240/2-A
Matrix: Water
Analysis Batch: 297469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	200	223		ug/L		112	80 - 120
Arsenic	200	213		ug/L		107	80 - 120
Barium	100	111		ug/L		111	80 - 120
Beryllium	100	106		ug/L		106	80 - 120
Cadmium	100	103		ug/L		103	80 - 120
Calcium	2.00	1.81		mg/L		91	80 - 120
Chromium	100	103		ug/L		103	80 - 120
Cobalt	100	103		ug/L		103	80 - 120
Lead	200	214		ug/L		107	80 - 120
Lithium	200	214		ug/L		107	80 - 120
Molybdenum	200	200		ug/L		100	80 - 120
Selenium	400	410		ug/L		103	80 - 120

Lab Sample ID: LCS 310-296240/2-A
Matrix: Water
Analysis Batch: 297560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	200	201		ug/L		101	80 - 120

Lab Sample ID: 310-193402-1 MS
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.51		200	231		ug/L		116	75 - 125
Arsenic	54		200	268		ug/L		107	75 - 125
Barium	500		100	612	4	ug/L		116	75 - 125
Beryllium	<0.27		100	102		ug/L		102	75 - 125
Cadmium	<0.049		100	103		ug/L		103	75 - 125
Calcium	220		2.00	213	4	mg/L		-114	75 - 125
Chromium	<1.1		100	102		ug/L		102	75 - 125
Cobalt	0.70		100	100		ug/L		99	75 - 125
Lead	<0.11		200	205		ug/L		102	75 - 125
Lithium	10		200	214		ug/L		102	75 - 125
Molybdenum	67		200	277		ug/L		105	75 - 125
Selenium	<1.0		400	407		ug/L		102	75 - 125

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QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-193402-1 MS
Matrix: Water
Analysis Batch: 297560

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	12000		200	12100	4	ug/L		-175	75 - 125

Lab Sample ID: 310-193402-1 MSD
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.51		200	231		ug/L		115	75 - 125	0	20
Arsenic	54		200	267		ug/L		106	75 - 125	0	20
Barium	500		100	618	4	ug/L		122	75 - 125	1	20
Beryllium	<0.27		100	102		ug/L		102	75 - 125	0	20
Cadmium	<0.049		100	104		ug/L		104	75 - 125	1	20
Calcium	220		2.00	213	4	mg/L		-134	75 - 125	0	20
Chromium	<1.1		100	101		ug/L		101	75 - 125	1	20
Cobalt	0.70		100	99.9		ug/L		99	75 - 125	0	20
Lead	<0.11		200	204		ug/L		102	75 - 125	1	20
Lithium	10		200	214		ug/L		102	75 - 125	0	20
Molybdenum	67		200	278		ug/L		106	75 - 125	0	20
Selenium	<1.0		400	406		ug/L		101	75 - 125	0	20

Lab Sample ID: 310-193402-1 MSD
Matrix: Water
Analysis Batch: 297560

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	12000		200	11300	4	ug/L		-589	75 - 125	7	20

Lab Sample ID: 310-193402-11 DU
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-309
Prep Type: Total/NA
Prep Batch: 296240
%Rec.

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Antimony	<0.51		<0.51		ug/L		NC	20
Arsenic	33		33.1		ug/L		2	20
Barium	220		233		ug/L		4	20
Beryllium	<0.27		<0.27		ug/L		NC	20
Cadmium	<0.049		<0.049		ug/L		NC	20
Calcium	59		61.7		mg/L		4	20
Chromium	<1.1		<1.1		ug/L		NC	20
Cobalt	0.33	J	0.337	J	ug/L		3	20
Lead	<0.11		<0.11		ug/L		NC	20
Lithium	<2.5		2.56	J	ug/L		NC	20
Molybdenum	100		103		ug/L		2	20
Selenium	<1.0		<1.0		ug/L		NC	20

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 310-193402-11 DU
 Matrix: Water
 Analysis Batch: 297560

Client Sample ID: MW-309
 Prep Type: Total/NA
 Prep Batch: 296240

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Boron	4400		4230		ug/L		4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 310-296313/1-A
 Matrix: Water
 Analysis Batch: 297087

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 296313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/24/20 09:00	10/26/20 12:33	1

Lab Sample ID: LCS 310-296313/2-A
 Matrix: Water
 Analysis Batch: 297087

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 296313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	1.67	1.77		ug/L		106	80 - 120

Lab Sample ID: MB 310-297634/1-A
 Matrix: Water
 Analysis Batch: 297878

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 297634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.20	0.10	ug/L		10/30/20 09:40	11/02/20 09:15	1

Lab Sample ID: LCS 310-297634/2-A
 Matrix: Water
 Analysis Batch: 297878

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 297634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	1.67	1.83		ug/L		110	80 - 120

Lab Sample ID: 310-193402-2 MS
 Matrix: Water
 Analysis Batch: 297878

Client Sample ID: MW-302
 Prep Type: Total/NA
 Prep Batch: 297634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.10		1.67	1.73		ug/L		104	80 - 120

Lab Sample ID: 310-193402-2 MSD
 Matrix: Water
 Analysis Batch: 297878

Client Sample ID: MW-302
 Prep Type: Total/NA
 Prep Batch: 297634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.10		1.67	1.82		ug/L		109	80 - 120	5	20

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QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 310-296323/1
Matrix: Water
Analysis Batch: 296323

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			10/20/20 15:13	1

Lab Sample ID: LCS 310-296323/2
Matrix: Water
Analysis Batch: 296323

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	974		mg/L		97	90 - 110

Lab Sample ID: 310-193402-14 DU
Matrix: Water
Analysis Batch: 296323

Client Sample ID: MW-311
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	640		660		mg/L		3	24

Lab Sample ID: MB 310-296506/1
Matrix: Water
Analysis Batch: 296506

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			10/21/20 16:44	1

Lab Sample ID: LCS 310-296506/2
Matrix: Water
Analysis Batch: 296506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	988		mg/L		99	90 - 110

Lab Sample ID: 310-193402-8 DU
Matrix: Water
Analysis Batch: 296506

Client Sample ID: MW-307
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	370		368		mg/L		1	24

Lab Sample ID: MB 310-296649/1
Matrix: Water
Analysis Batch: 296649

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<26		30	26	mg/L			10/22/20 15:01	1

Lab Sample ID: LCS 310-296649/2
Matrix: Water
Analysis Batch: 296649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	1000	992		mg/L		99	90 - 110

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QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 310-296166/1
Matrix: Water
Analysis Batch: 296166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.0		SU		100	98 - 102

Lab Sample ID: 310-193402-9 DU
Matrix: Water
Analysis Batch: 296166

Client Sample ID: MW-307A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.9	HF	7.9		SU		0.1	20

Lab Sample ID: 310-193402-16 DU
Matrix: Water
Analysis Batch: 296166

Client Sample ID: MW-313
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.2	HF	7.2		SU		0.8	20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

HPLC/IC

Analysis Batch: 297035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	9056A	
310-193402-2	MW-302	Total/NA	Water	9056A	
310-193402-3	MW-302A	Total/NA	Water	9056A	
310-193402-4	MW-303	Total/NA	Water	9056A	
310-193402-5	MW-304	Total/NA	Water	9056A	
310-193402-6	MW-305	Total/NA	Water	9056A	
310-193402-7	MW-306	Total/NA	Water	9056A	
310-193402-8	MW-307	Total/NA	Water	9056A	
310-193402-9	MW-307A	Total/NA	Water	9056A	
310-193402-10	MW-308	Total/NA	Water	9056A	
310-193402-11	MW-309	Total/NA	Water	9056A	
310-193402-12	MW-310	Total/NA	Water	9056A	
310-193402-13	MW-310A	Total/NA	Water	9056A	
310-193402-14	MW-311	Total/NA	Water	9056A	
310-193402-15	MW-312	Total/NA	Water	9056A	
310-193402-16	MW-313	Total/NA	Water	9056A	
310-193402-17	MW-313A	Total/NA	Water	9056A	
310-193402-18	Field Blank	Total/NA	Water	9056A	
MB 310-297035/3	Method Blank	Total/NA	Water	9056A	
LCS 310-297035/4	Lab Control Sample	Total/NA	Water	9056A	
310-193402-1 MS	MW-301	Total/NA	Water	9056A	
310-193402-1 MSD	MW-301	Total/NA	Water	9056A	

Metals

Prep Batch: 296240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	3010A	
310-193402-2	MW-302	Total/NA	Water	3010A	
310-193402-3	MW-302A	Total/NA	Water	3010A	
310-193402-4	MW-303	Total/NA	Water	3010A	
310-193402-5	MW-304	Total/NA	Water	3010A	
310-193402-6	MW-305	Total/NA	Water	3010A	
310-193402-7	MW-306	Total/NA	Water	3010A	
310-193402-8	MW-307	Total/NA	Water	3010A	
310-193402-9	MW-307A	Total/NA	Water	3010A	
310-193402-10	MW-308	Total/NA	Water	3010A	
310-193402-11	MW-309	Total/NA	Water	3010A	
310-193402-12	MW-310	Total/NA	Water	3010A	
310-193402-13	MW-310A	Total/NA	Water	3010A	
310-193402-14	MW-311	Total/NA	Water	3010A	
310-193402-15	MW-312	Total/NA	Water	3010A	
310-193402-16	MW-313	Total/NA	Water	3010A	
310-193402-17	MW-313A	Total/NA	Water	3010A	
310-193402-18	Field Blank	Total/NA	Water	3010A	
MB 310-296240/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-296240/2-A	Lab Control Sample	Total/NA	Water	3010A	
310-193402-1 MS	MW-301	Total/NA	Water	3010A	
310-193402-1 MSD	MW-301	Total/NA	Water	3010A	
310-193402-11 DU	MW-309	Total/NA	Water	3010A	

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QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Metals

Prep Batch: 296313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	7470A	
MB 310-296313/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-296313/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 297087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	7470A	296313
MB 310-296313/1-A	Method Blank	Total/NA	Water	7470A	296313
LCS 310-296313/2-A	Lab Control Sample	Total/NA	Water	7470A	296313

Analysis Batch: 297469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	6020A	296240
310-193402-2	MW-302	Total/NA	Water	6020A	296240
310-193402-3	MW-302A	Total/NA	Water	6020A	296240
310-193402-4	MW-303	Total/NA	Water	6020A	296240
310-193402-5	MW-304	Total/NA	Water	6020A	296240
310-193402-6	MW-305	Total/NA	Water	6020A	296240
310-193402-7	MW-306	Total/NA	Water	6020A	296240
310-193402-8	MW-307	Total/NA	Water	6020A	296240
310-193402-9	MW-307A	Total/NA	Water	6020A	296240
310-193402-10	MW-308	Total/NA	Water	6020A	296240
310-193402-11	MW-309	Total/NA	Water	6020A	296240
310-193402-12	MW-310	Total/NA	Water	6020A	296240
310-193402-13	MW-310A	Total/NA	Water	6020A	296240
310-193402-14	MW-311	Total/NA	Water	6020A	296240
310-193402-15	MW-312	Total/NA	Water	6020A	296240
310-193402-16	MW-313	Total/NA	Water	6020A	296240
310-193402-17	MW-313A	Total/NA	Water	6020A	296240
310-193402-18	Field Blank	Total/NA	Water	6020A	296240
MB 310-296240/1-A	Method Blank	Total/NA	Water	6020A	296240
LCS 310-296240/2-A	Lab Control Sample	Total/NA	Water	6020A	296240
310-193402-1 MS	MW-301	Total/NA	Water	6020A	296240
310-193402-1 MSD	MW-301	Total/NA	Water	6020A	296240
310-193402-11 DU	MW-309	Total/NA	Water	6020A	296240

Analysis Batch: 297560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	6020A	296240
310-193402-2	MW-302	Total/NA	Water	6020A	296240
310-193402-3	MW-302A	Total/NA	Water	6020A	296240
310-193402-4	MW-303	Total/NA	Water	6020A	296240
310-193402-5	MW-304	Total/NA	Water	6020A	296240
310-193402-6	MW-305	Total/NA	Water	6020A	296240
310-193402-7	MW-306	Total/NA	Water	6020A	296240
310-193402-8	MW-307	Total/NA	Water	6020A	296240
310-193402-9	MW-307A	Total/NA	Water	6020A	296240
310-193402-10	MW-308	Total/NA	Water	6020A	296240
310-193402-11	MW-309	Total/NA	Water	6020A	296240
310-193402-12	MW-310	Total/NA	Water	6020A	296240
310-193402-13	MW-310A	Total/NA	Water	6020A	296240

Eurofins TestAmerica, Cedar Falls

QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Metals (Continued)

Analysis Batch: 297560 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-14	MW-311	Total/NA	Water	6020A	296240
310-193402-15	MW-312	Total/NA	Water	6020A	296240
310-193402-16	MW-313	Total/NA	Water	6020A	296240
310-193402-17	MW-313A	Total/NA	Water	6020A	296240
310-193402-18	Field Blank	Total/NA	Water	6020A	296240
MB 310-296240/1-A	Method Blank	Total/NA	Water	6020A	296240
LCS 310-296240/2-A	Lab Control Sample	Total/NA	Water	6020A	296240
310-193402-1 MS	MW-301	Total/NA	Water	6020A	296240
310-193402-1 MSD	MW-301	Total/NA	Water	6020A	296240
310-193402-11 DU	MW-309	Total/NA	Water	6020A	296240

Prep Batch: 297634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-2	MW-302	Total/NA	Water	7470A	
310-193402-3	MW-302A	Total/NA	Water	7470A	
310-193402-4	MW-303	Total/NA	Water	7470A	
310-193402-5	MW-304	Total/NA	Water	7470A	
310-193402-6	MW-305	Total/NA	Water	7470A	
310-193402-7	MW-306	Total/NA	Water	7470A	
310-193402-8	MW-307	Total/NA	Water	7470A	
310-193402-9	MW-307A	Total/NA	Water	7470A	
310-193402-10	MW-308	Total/NA	Water	7470A	
310-193402-11	MW-309	Total/NA	Water	7470A	
310-193402-12	MW-310	Total/NA	Water	7470A	
310-193402-13	MW-310A	Total/NA	Water	7470A	
310-193402-14	MW-311	Total/NA	Water	7470A	
310-193402-15	MW-312	Total/NA	Water	7470A	
310-193402-16	MW-313	Total/NA	Water	7470A	
310-193402-17	MW-313A	Total/NA	Water	7470A	
310-193402-18	Field Blank	Total/NA	Water	7470A	
MB 310-297634/1-A	Method Blank	Total/NA	Water	7470A	
LCS 310-297634/2-A	Lab Control Sample	Total/NA	Water	7470A	
310-193402-2 MS	MW-302	Total/NA	Water	7470A	
310-193402-2 MSD	MW-302	Total/NA	Water	7470A	

Analysis Batch: 297878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-2	MW-302	Total/NA	Water	7470A	297634
310-193402-3	MW-302A	Total/NA	Water	7470A	297634
310-193402-4	MW-303	Total/NA	Water	7470A	297634
310-193402-5	MW-304	Total/NA	Water	7470A	297634
310-193402-6	MW-305	Total/NA	Water	7470A	297634
310-193402-7	MW-306	Total/NA	Water	7470A	297634
310-193402-8	MW-307	Total/NA	Water	7470A	297634
310-193402-9	MW-307A	Total/NA	Water	7470A	297634
310-193402-10	MW-308	Total/NA	Water	7470A	297634
310-193402-11	MW-309	Total/NA	Water	7470A	297634
310-193402-12	MW-310	Total/NA	Water	7470A	297634
310-193402-13	MW-310A	Total/NA	Water	7470A	297634
310-193402-14	MW-311	Total/NA	Water	7470A	297634
310-193402-15	MW-312	Total/NA	Water	7470A	297634

Eurofins TestAmerica, Cedar Falls

QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Metals (Continued)

Analysis Batch: 297878 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-16	MW-313	Total/NA	Water	7470A	297634
310-193402-17	MW-313A	Total/NA	Water	7470A	297634
310-193402-18	Field Blank	Total/NA	Water	7470A	297634
MB 310-297634/1-A	Method Blank	Total/NA	Water	7470A	297634
LCS 310-297634/2-A	Lab Control Sample	Total/NA	Water	7470A	297634
310-193402-2 MS	MW-302	Total/NA	Water	7470A	297634
310-193402-2 MSD	MW-302	Total/NA	Water	7470A	297634

General Chemistry

Analysis Batch: 296166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	SM 4500 H+ B	
310-193402-2	MW-302	Total/NA	Water	SM 4500 H+ B	
310-193402-3	MW-302A	Total/NA	Water	SM 4500 H+ B	
310-193402-4	MW-303	Total/NA	Water	SM 4500 H+ B	
310-193402-5	MW-304	Total/NA	Water	SM 4500 H+ B	
310-193402-6	MW-305	Total/NA	Water	SM 4500 H+ B	
310-193402-7	MW-306	Total/NA	Water	SM 4500 H+ B	
310-193402-8	MW-307	Total/NA	Water	SM 4500 H+ B	
310-193402-9	MW-307A	Total/NA	Water	SM 4500 H+ B	
310-193402-10	MW-308	Total/NA	Water	SM 4500 H+ B	
310-193402-11	MW-309	Total/NA	Water	SM 4500 H+ B	
310-193402-12	MW-310	Total/NA	Water	SM 4500 H+ B	
310-193402-13	MW-310A	Total/NA	Water	SM 4500 H+ B	
310-193402-14	MW-311	Total/NA	Water	SM 4500 H+ B	
310-193402-15	MW-312	Total/NA	Water	SM 4500 H+ B	
310-193402-16	MW-313	Total/NA	Water	SM 4500 H+ B	
310-193402-17	MW-313A	Total/NA	Water	SM 4500 H+ B	
310-193402-18	Field Blank	Total/NA	Water	SM 4500 H+ B	
LCS 310-296166/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCS 310-296166/15	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
310-193402-9 DU	MW-307A	Total/NA	Water	SM 4500 H+ B	
310-193402-16 DU	MW-313	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 296323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	SM 2540C	
310-193402-2	MW-302	Total/NA	Water	SM 2540C	
310-193402-9	MW-307A	Total/NA	Water	SM 2540C	
310-193402-10	MW-308	Total/NA	Water	SM 2540C	
310-193402-11	MW-309	Total/NA	Water	SM 2540C	
310-193402-12	MW-310	Total/NA	Water	SM 2540C	
310-193402-14	MW-311	Total/NA	Water	SM 2540C	
MB 310-296323/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-296323/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-193402-14 DU	MW-311	Total/NA	Water	SM 2540C	

Analysis Batch: 296506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-3	MW-302A	Total/NA	Water	SM 2540C	

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QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

General Chemistry (Continued)

Analysis Batch: 296506 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-4	MW-303	Total/NA	Water	SM 2540C	
310-193402-5	MW-304	Total/NA	Water	SM 2540C	
310-193402-6	MW-305	Total/NA	Water	SM 2540C	
310-193402-7	MW-306	Total/NA	Water	SM 2540C	
310-193402-8	MW-307	Total/NA	Water	SM 2540C	
310-193402-13	MW-310A	Total/NA	Water	SM 2540C	
310-193402-15	MW-312	Total/NA	Water	SM 2540C	
310-193402-16	MW-313	Total/NA	Water	SM 2540C	
310-193402-17	MW-313A	Total/NA	Water	SM 2540C	
MB 310-296506/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-296506/2	Lab Control Sample	Total/NA	Water	SM 2540C	
310-193402-8 DU	MW-307	Total/NA	Water	SM 2540C	

Analysis Batch: 296649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-18	Field Blank	Total/NA	Water	SM 2540C	
MB 310-296649/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 310-296649/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 297541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	Field Sampling	
310-193402-2	MW-302	Total/NA	Water	Field Sampling	
310-193402-3	MW-302A	Total/NA	Water	Field Sampling	
310-193402-4	MW-303	Total/NA	Water	Field Sampling	
310-193402-5	MW-304	Total/NA	Water	Field Sampling	
310-193402-6	MW-305	Total/NA	Water	Field Sampling	
310-193402-7	MW-306	Total/NA	Water	Field Sampling	
310-193402-8	MW-307	Total/NA	Water	Field Sampling	
310-193402-9	MW-307A	Total/NA	Water	Field Sampling	
310-193402-10	MW-308	Total/NA	Water	Field Sampling	
310-193402-11	MW-309	Total/NA	Water	Field Sampling	
310-193402-12	MW-310	Total/NA	Water	Field Sampling	
310-193402-13	MW-310A	Total/NA	Water	Field Sampling	
310-193402-14	MW-311	Total/NA	Water	Field Sampling	
310-193402-15	MW-312	Total/NA	Water	Field Sampling	
310-193402-16	MW-313	Total/NA	Water	Field Sampling	
310-193402-17	MW-313A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-301
Date Collected: 10/16/20 12:47
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 08:08	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 19:42	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		10	297560	10/29/20 13:10	SAD	TAL CF
Total/NA	Prep	7470A			296313	10/24/20 09:00	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297087	10/26/20 13:36	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296323	10/20/20 15:13	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:26	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/16/20 12:47	SLD	TAL CF

Client Sample ID: MW-302
Date Collected: 10/16/20 11:25
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 08:55	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 19:53	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		10	297560	10/29/20 13:29	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:19	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296323	10/20/20 15:13	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:27	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/16/20 11:25	SLD	TAL CF

Client Sample ID: MW-302A
Date Collected: 10/16/20 09:55
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 09:10	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:06	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		10	297560	10/29/20 13:31	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:25	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:28	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/16/20 09:55	SLD	TAL CF

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-303

Lab Sample ID: 310-193402-4

Date Collected: 10/16/20 08:24

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 09:57	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:08	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		10	297560	10/29/20 13:34	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:27	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:30	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/16/20 08:24	SLD	TAL CF

Client Sample ID: MW-304

Lab Sample ID: 310-193402-5

Date Collected: 10/15/20 17:57

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 10:13	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:11	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		4	297560	10/29/20 13:37	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:34	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:31	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/15/20 17:57	SLD	TAL CF

Client Sample ID: MW-305

Lab Sample ID: 310-193402-6

Date Collected: 10/15/20 11:15

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 10:28	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:13	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297560	10/29/20 13:39	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:36	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:32	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/15/20 11:15	SLD	TAL CF

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Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-306
Date Collected: 10/15/20 09:50
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 10:44	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:16	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		2	297560	10/29/20 13:42	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:38	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:33	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/15/20 09:50	SLD	TAL CF

Client Sample ID: MW-307
Date Collected: 10/15/20 08:27
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 10:59	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:19	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		2	297560	10/29/20 13:45	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:40	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:33	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/15/20 08:27	SLD	TAL CF

Client Sample ID: MW-307A
Date Collected: 10/14/20 17:00
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 11:24	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:21	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		2	297560	10/29/20 13:47	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:42	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296323	10/20/20 15:13	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:43	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/14/20 17:00	SLD	TAL CF

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
 SDG: 25220066

Client Sample ID: MW-308
Date Collected: 10/14/20 15:35
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 11:40	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:24	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		2	297560	10/29/20 13:50	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:44	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296323	10/20/20 15:13	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:45	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/14/20 15:35	SLD	TAL CF

Client Sample ID: MW-309
Date Collected: 10/14/20 14:07
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 11:55	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:27	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		2	297560	10/29/20 14:03	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:47	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296323	10/20/20 15:13	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:46	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/14/20 14:07	SLD	TAL CF

Client Sample ID: MW-310
Date Collected: 10/14/20 11:12
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 12:11	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:42	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297560	10/29/20 14:08	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:49	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296323	10/20/20 15:13	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:47	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/14/20 11:12	SLD	TAL CF

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Client Sample ID: MW-310A

Lab Sample ID: 310-193402-13

Date Collected: 10/16/20 13:50

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 12:26	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:45	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297560	10/29/20 14:11	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:51	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:49	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/16/20 13:50	SLD	TAL CF

Client Sample ID: MW-311

Lab Sample ID: 310-193402-14

Date Collected: 10/14/20 12:35

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 13:13	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:48	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297560	10/29/20 14:14	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:53	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296323	10/20/20 15:13	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:50	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/14/20 12:35	SLD	TAL CF

Client Sample ID: MW-312

Lab Sample ID: 310-193402-15

Date Collected: 10/15/20 13:08

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 13:29	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:50	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		4	297560	10/29/20 14:16	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 09:59	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:51	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/15/20 13:08	SLD	TAL CF

Eurofins TestAmerica, Cedar Falls

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Client Sample ID: MW-313

Lab Sample ID: 310-193402-16

Date Collected: 10/15/20 14:27

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 13:55	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:53	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		4	297560	10/29/20 14:19	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 10:01	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:57	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/15/20 14:27	SLD	TAL CF

Client Sample ID: MW-313A

Lab Sample ID: 310-193402-17

Date Collected: 10/15/20 16:15

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	297035	10/24/20 14:00	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:55	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		2	297560	10/29/20 14:21	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 10:04	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296506	10/21/20 16:44	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 03:59	JMH	TAL CF
Total/NA	Analysis	Field Sampling		1	297541	10/15/20 16:15	SLD	TAL CF

Client Sample ID: Field Blank

Lab Sample ID: 310-193402-18

Date Collected: 10/16/20 13:15

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	297035	10/24/20 14:16	ACJ	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:58	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297560	10/29/20 14:24	SAD	TAL CF
Total/NA	Prep	7470A			297634	10/30/20 09:40	ACJ	TAL CF
Total/NA	Analysis	7470A		1	297878	11/02/20 10:06	ACJ	TAL CF
Total/NA	Analysis	SM 2540C		1	296649	10/22/20 15:01	SAS	TAL CF
Total/NA	Analysis	SM 4500 H+ B		1	296166	10/20/20 04:01	JMH	TAL CF

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Eurofins TestAmerica, Cedar Falls

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Laboratory: Eurofins TestAmerica, Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-1
SDG: 25220066

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	TAL CF
6020A	Metals (ICP/MS)	SW846	TAL CF
7470A	Mercury (CVAA)	SW846	TAL CF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CF
SM 4500 H+ B	pH	SM	TAL CF
Field Sampling	Field Sampling	EPA	TAL CF
3010A	Preparation, Total Metals	SW846	TAL CF
7470A	Preparation, Mercury	SW846	TAL CF

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



310-193402 Chain of Custody

Cooler/Sample Receipt and Temperature

Client Information			
Client: <u>SCS Eng.</u>			
City/State:	CITY <u>Clive</u>	STATE <u>IA</u>	Project: <u>Burly In</u>
Receipt Information			
Date/Time Received:	DATE <u>10-19-20</u>	TIME <u>1655</u>	Received By: <u>JB</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee			
<input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Goods/Container			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>2</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE	
Thermometer ID:	<u>N</u>	Correction Factor (°C): <u>0.0</u>	
Temp. Blank Temperature: If no temp blank or temp blank temperature above criteria, proceed to Sample Container Temperature.			
Uncorrected Temp (°C):	<u>-0.6</u>	Corrected Temp (°C): <u>-0.6</u>	
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			
<u>Only 11L Nitric rec'd for MW-310A Also nitric container not field filtered written on bottle</u>			

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS Eng			
City/State:	CITY Clive	STATE IA	Project: Burlington
Receipt Information			
Date/Time Received:	DATE 10-19-20	TIME 1655	Received By: JB
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Coolers/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>2</u> of <u>6</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	N	Correction Factor (°C):	0.0
<small>Temp blank temperature, if no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature</small>			
Uncorrected Temp (°C):	0.2	Corrected Temp (°C):	0.2
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exception Noted:			
1) If temperature exceeds criteria, was sample(s) received same day of sampling?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
a) If yes: Is there evidence that the chilling process began?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?)		<input type="checkbox"/> Yes	<input type="checkbox"/> No
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Cooler/Sample Receipt and Temperature Log Form

Client Information		
Client: SCS Engin.		
City/State: Clive IA	STATE: IA	Project: Burlington
Receipt Information		
Date/Time Received: 10-19-20 1655	DATE: 10-19-20	TIME: 1655
Received By: JB		
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Container		
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 3 of 6
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record		
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID: N	Correction Factor (°C): 0.0	
<small>Temp Blank Temperature: If no temp blank or temp blank temperature above criteria, proceed to Sample Container temperature.</small>		
Uncorrected Temp (°C): 1.2	Corrected Temp (°C): 1.2	
Sample Container Temperature		
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>
Uncorrected Temp (°C):		
Corrected Temp (°C):		
Exceptions Noted		
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No		
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No		
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No		
NOTE: If yes, contact PM before proceeding. If no, proceed with login		
Additional Comments		

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS Engin.			
City/State:	CITY CLIVE	STATE IA	Project: Burlington
Receipt Information			
Date/Time Received:	DATE 10-19-20	TIME 1655	Received By: AB
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 4 of 6	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	N	Correction Factor (°C):	0.0
<small>Temp Blank Temperature: If no temp blank or temp blank is present, (e. above entry), proceed to Sample Container Temperature.</small>			
Uncorrected Temp (°C):		Corrected Temp (°C):	
Sample Container Temperature			
Container(s) used:	CONTAINER 1 500 mL-PI-NT	CONTAINER 2	
Uncorrected Temp (°C):	0.8		
Corrected Temp (°C):	0.8		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS			
City/State:	CITY Clive	STATE IA	Project:
Receipt Information			
Date/Time Received:	DATE 10-19-20	TIME 1655	Received By: AB
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 5 of 6	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? 1	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	N	Correction Factor (°C):	0.0
Temp Blank Temperature - If no temp blank, or temp blank temperature above 6°C, proceed to Sample Container temperature.			
Uncorrected Temp (°C):	0.3	Corrected Temp (°C):	0.3
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
a) If yes: Is there evidence that the chilling process began?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised (e.g., bulging septa, broken/cracked bottles, frozen solid?)		<input type="checkbox"/> Yes	<input type="checkbox"/> No
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS Engin.			
City/State:	CITY CLIVE	STATE IA	Project:
Receipt Information			
Date/Time Received:	DATE 10-19-20	TIME 1655	Received By: JB
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>6</u> of <u>6</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE	
Thermometer ID:	N	Correction Factor (°C): 0.0	
Temp Blank Temperature: If no temp blank or temp blank temperature above 6°C, do not proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
Sample Container Temperature			
Container(s) used:	CONTAINER 1 500mL-PI-NT	CONTAINER 2	
Uncorrected Temp (°C):	2.1		
Corrected Temp (°C):	2.1		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Chain of Custody Record

Stamp: **Tantien Buszka**
 Phone: **764-943-0855**

Lab PM: **Friedrich, Sandie**
 E-Mail: **Sandie.friedrich@eurofinset.com**

Client Information
 Client Contact: **Tantien Buszka**
 Company: **SCS Engineers**
 Address: **8450 Hickman Road Suite 2021**
 City: **Clive**
 State, Zip: **IA, 50325**
 Phone: **764-943-0855**
 Email: **tbuszka@scsengineers.com**
 Project Name: **Burlington Gen Station 25220066**
 Site: **↓**

Due Date Requested:
 TAT Requested (days):
 PO #: **25220066**
 WO #:
 Project #: **31011020**
 SSOW#:

Center Tracking (Yes):
 COC No: **310-54738-16112.1**
 Page: **Page 1 of 2**
 Job #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefl, B=biological)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		6020A - Metals - Hg		2540C - Calc'd, 9056A, ORGM, 28D, SMA, 571, H ₄		903.0 - Radium 226		904.0 - Radium 228		Special Instructions/Note:
					D	N	D	N	D	N	D	N	D	N			
MW-301	10-16-20	12:47	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	Short hold time for TDS
MW-302	10-16-20	11:25	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-302A	10-16-20	4:55	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-303	10-16-20	8:24	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-304	10-15-20	17:57	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-305	10-15-20	11:15	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-306	10-15-20	4:50	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-307	10-15-20	8:27	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-307A	10-14-20	17:00	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-308	10-14-20	15:35	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	
MW-309	10-14-20	14:07	G	Water	X	X	X	X	X	X	X	X	X	X	X	X	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)
 Poison B Unknown Radiological
 Empty Kit Relinquished by:
 Relinquished by: **Matthew Cahalan** Date: **10/19/20**
 Relinquished by: **1130** Date/Time:
 Relinquished by: Date/Time:
 Custody Seal No. **Δ Yes Δ No**

Analysis Requested
 Total Number of containers: **13**
 Special Instructions/Note:
 Return To Client Disposal By Lab Archive For _____ Months
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Special Instructions/QC Requirements:
 Received by: **ZB** Date/Time: **10-19-20 16:55**
 Received by: Company: **ETACF**
 Received by: Company: **Company**
 Received by: Company: **Company**
 Cooler Temperature(s) °C and Other Remarks:

Client Information
 Client Contact: Tamara Buszka
 Company: SCS Engineers
 Address: 8450 Hickman Road Suite 20 21
 City: Clive
 State, Zip: IA, 50325
 Phone: 264-943-0855
 Email: tbuszka@scsengineers.com

Project Information
 Project #: 31011020
 Site: Burlington Gen Station 25220066

Sample Information
 Due Date Requested:
 TAT Requested (days):
 PO #: 25220066
 WO #:
 Sample ID: 6020A - Metals - Hg

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=water, S=solid, O=waste/oil, I=ice, F=field)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A - Metals - Hg	2540C_Calcd, 9056A_ORGFM, 28D, 514E901_Hg	903.0 - Radium 226	904.0 - Radium 228	Analysis Requested	Preservation Codes:	Special Instructions/Note:
MW-310	10-14-20	11:12	L	Water	X	X	X	X	X	X		M - Hexane N - None C - AsNaO2 P - Na2OAS F - NH4SO4 R - Na2SO3 G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
MW-310A	10-16-20	13:50	L	Water	X	X	X	X	X	X			Dissolved metals bottle was not filtered
MW-311	10-14-20	12:35	L	Water	X	X	X	X	X	X			Short hold time for TDS
MW-312	10-15-20	13:08	L	Water	X	X	X	X	X	X			6 coolers associated with this col
MW-313	10-15-20	14:27	L	Water	X	X	X	X	X	X			
MW-313A	10-15-20	16:15	L	Water	X	X	X	X	X	X			
Field Blank	10-16-20	13:15	L	Water	X	X	X	X	X	X			

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____ Time: _____

Relinquished by: Matthew Cahalan Date/Time: 10/19/20 1130 Company: SCS

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seal No.: ETACF

Received by: JB Date/Time: 10-19-20 1655 Company: ETACF

Received by: _____ Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks:

Client Information
 Client Contact: Tawilken Buzsika
 Company: SCS Engineers
 Address: 8450 Hickman Road Suite 21
 City: Clive
 State, Zip: IA, 50325
 Phone: 264.903-0855
 Email: tbuzsika@scsengineers.com

Sample ID: Tanten Buzsika
 Phone: 264.903-0855

Lab ID: Fricke, Stenilo
 E-Mail: ffricke@eurofins.com

COC No: 310-54739-16396.1
 Page: Page 1 of 2
 Job #:

Due Date Requested: 25220066
 TAT Requested (days):
 PO #: 25220066
 WO #:
 Project #: 31011020
 SSOV#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, L=leachate, A=air)	Field Filtered Sample (Yes or No)		Perform MS/SD (Yes or No)		2320B - Alkalinity - Carb/Bicarb		6020A - Metals (5)		6020A - Metals (4)		Analysis Requested	Preservation Codes	Special Instructions/Note:
					M	D	M	D	M	D	M	D	M	D			
MW-301	10-16-20	12:47	G	Water	X	X	X	X	X	X	X	X	X				
MW-302	10-16-20	11:25	G	Water	X	X	X	X	X	X	X	X	X				
MW-302A	10-16-20	4:55	G	Water	X	X	X	X	X	X	X	X	X				
MW-303	10-16-20	8:24	G	Water	X	X	X	X	X	X	X	X	X				
MW-304	10-15-20	17:57	G	Water	X	X	X	X	X	X	X	X	X				
MW-305	10-15-20	11:15	G	Water	X	X	X	X	X	X	X	X	X				
MW-306	10-15-20	9:50	G	Water	X	X	X	X	X	X	X	X	X				
MW-307	10-15-20	8:27	G	Water	X	X	X	X	X	X	X	X	X				
MW-307A	10-14-20	17:00	G	Water	X	X	X	X	X	X	X	X	X				
MW-308	10-14-20	15:35	G	Water	X	X	X	X	X	X	X	X	X				
MW-309	10-14-20	14:07	G	Water	X	X	X	X	X	X	X	X	X				

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: **Matthew Catalan** Date/Time: **10/19/20 11:30**

Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Custody Seal: Intact: Yes No

Custody Seal No: _____

Received by: **YB** Date/Time: **10-19-20 16:55**

Received by: _____ Date/Time: _____

Received by: _____ Date/Time: _____

Company: **SCS**

Company: **ETACF**

Company: _____

Method of Shipment: _____

Special Instructions/QC Requirements: _____

Return To Client: Disposal By Lab: Archive For: _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Chain of Custody Record

TestAmerica, Cedar Falls

Venture Way
Cedar Falls, IA 50613
Phone (319) 277-2401 Fax (319) 277-2425

Client Information
Client Contact:
Tara Buzicka

Company:
SCS Engineers

Address:
8450 Hickman Road, Suite 21

City:
Clive

State, Zip:
IA, 50325

Phone:
264-943-0855

Email:
tbuzicka@scsengineers.com

Project Name:
Burlington Gen Station 25220066-additional

Site:
↓

Sample: **Tanzen Buzicka**
Phone: **264-943-0855**
Carrier Tracking (No):
Lab # (Print/Ink, Stencil):
E-Mail: **tbuzicka@eurofins.com**

Date Requested:
TAT Requested (days):
PO #: **25220066**
WO #:
Project #: **31011020**
SSOW#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, I=ice, A=air)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		2320B - Alkalinity - Carb/Bicarb		6020A - Metals (5)		6020A - Metals (4)		Special Instructions/Note:
					X	N	X	N	X	N	X	N	X	N	
MW-310	10-14-20	11:12	G	Water	X		X		X		X		X		
MW-310A	10-16-20	13:50	G	Water	X		X		X		X		X		Dissolved metals bottle was not filled.
MW-311	10-14-20	12:35	G	Water	X		X		X		X		X		
MW-312	10-15-20	13:08	G	Water	X		X		X		X		X		
MW-313	10-15-20	14:27	G	Water	X		X		X		X		X		
MW-313A	10-15-20	16:15	G	Water	X		X		X		X		X		9 coolers associated with this col
Field Blank	10-16-20	13:15	G	Water	X		X		X		X		X		
				Water	X		X		X		X		X		

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: **Matthew Cahalan** Date: **10/14/20 1130**
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____
 Custody Seal No: _____
 Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:
 Method of Shipment:
 Received by: **SCS** Date/Time: **10-19-20 1655** Company: **ETACF**
 Received by: _____ Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks:

Table 1. Sampling Points and Parameters - CCR Rule Sampling Program Assessment Monitoring
Groundwater Monitoring - Burlington Generating Station / SCS Engineers Project #25220066

Parameter	MW- 301	MW- 302	MW- 302A	MW- 303	MW- 304	MW- 305	MW- 306	MW- 307	MW- 307A	MW- 308	MW- 309	MW- 310	MW- 310A	MW- 311	MW- 312	MW- 313	MW- 313A	MW- 313B	Field Blank	TOTAL
Appendix III Parameters																				
Boron	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Calcium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Chloride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Fluoride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
pH	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Sulfate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
TDS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Appendix IV Parameters																				
Antimony	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Arsenic	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Barium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Beryllium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Cadmium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Chromium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Cobalt	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Fluoride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Lead	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Lithium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Mercury	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Molybdenum	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Selenium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Thallium																				0
Radium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Field Parameters																				
Groundwater Elevation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Well Depth	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
pH (field)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Specific Conductance	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Dissolved Oxygen	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
ORP	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Temperature	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Turbidity	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Color	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Odor	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Additional Lab Parameters - REPORT SEPARATELY																				
Bicarbonate (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Carbonate (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Iron (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Magnesium (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Manganese (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Potassium (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Sodium (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Iron (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Lithium (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7
Manganese (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Molybdenum (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	11

Notes:

I:\25220066.00\Data and Calculations\Field Work Requests\[Table_1_BGS_CCR_Rule_Sampling_2010.xls]Sheet1

11/2/2020



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-193402-1

SDG Number: 25220066

Login Number: 193402

List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1

Creator: Homolar, Dana J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	only 1 1L Nitric for Radium on 310A also no field filtered bottle for 310A
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Table 1. Groundwater Monitoring Results - Field Parameters
Burlington Generating Station / SCS Engineers Project #25220066.00
October 2020

Sample	Sample Date/Time	Temperature (Deg. C)	pH (Std. Units)	Dissolved Oxygen (mg/L)	Specific Conductivity (µmhos/cm)	ORP (mV)	Turbidity	Groundwater Elevation (amsl)
MW-301	10/16/2020 12:40	13.7	7.07	0.09	1,503	-187.5	3.41	519.26
MW-302	10/16/2020 11:15	12.90	7.87	0.08	1,168	-237.1	0.07	518.94
MW-302A	10/16/2020 9:45	13.10	7.26	0.19	951	-175.3	3.82	518.79
MW-303	10/16/2020 8:15	13.70	7.19	0.12	902	-185.6	2.03	518.78
MW-304	10/15/2020 17:50	14.70	8.46	0.08	1,062	-282.6	0.02	518.69
MW-305	10/15/2020 11:05	14.60	7.23	0.37	987	-175.0	0.02	519.00
MW-306	10/15/2020 9:35	14.10	10.00	0.11	453.7	-273.7	0.02	519.05
MW-307	10/15/2020 8:15	14.00	10.05	0.11	564.8	-269.7	0.02	519.33
MW-307A	10/14/2020 16:45	14.60	7.80	0.18	553.6	-189.9	2.96	519.00
MW-308	10/14/2020 15:20	14.70	9.70	0.10	682	-264.6	0.15	519.02
MW-309	10/14/2020 13:55	14.30	7.61	0.14	851	-208.4	18.9	519.28
MW-310	10/14/2020 11:00	16.40	7.34	0.08	711	-223.6	3.79	523.81
MW-310A	10/16/2020 13:50	--	--	--	--	--	--	489.84
MW-311	10/14/2020 12:20	14.50	7.41	0.10	1,041	-194.0	2.36	520.59
MW-312	10/15/2020 12:50	15.1	7.37	0.13	854	-203.1	0.02	518.68
MW-313	10/15/2020 14:10	15.3	7.16	0.14	999	-183.3	14.3	518.70
MW-313A	10/15/2020 16:05	14.8	7.64	0.10	1,133	-190.1	0.02	518.61

Abbreviations:

mg/L = milligrams per liter
mV = millivolts

amsl = above mean sea level
µmhos/cm = micromohs per cm

-- = Not Applicable

Created by: MDB
Last revision by: LMH
Checked by: ACW
Scient QA/QC: NDK

Date: 6/11/2019
Date: 10/26/2020
Date: 10/28/2020
Date: 10/28/2020

C:\Users\FredrickS\AppData\Local\Microsoft\Windows\InetCache\Content.Outlook\910BKT5\ [BGS_CCR_Field_2010.xlsx]GW Field Parameters

ANALYTICAL REPORT

Eurofins TestAmerica, Cedar Falls
3019 Venture Way
Cedar Falls, IA 50613
Tel: (319)277-2401

Laboratory Job ID: 310-193402-3
Laboratory Sample Delivery Group: 25220066
Client Project/Site: Burlington Gen Station - 25220066

For:
SCS Engineers
2830 Dairy Drive
Madison, Wisconsin 53718

Attn: Meghan Blodgett



Authorized for release by:
10/30/2020 10:25:35 AM

Sandie Fredrick, Project Manager II
(920)261-1660
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Job ID: 310-193402-3

Laboratory: Eurofins TestAmerica, Cedar Falls

Narrative

Job Narrative 310-193402-3

Comments

No additional comments.

Receipt

The samples were received on 10/19/2020 4:55 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were -0.6° C, 0.2° C, 0.3° C, 0.8° C, 1.2° C and 2.1° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Sample Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
310-193402-1	MW-301	Water	10/16/20 12:47	10/19/20 16:55	
310-193402-2	MW-302	Water	10/16/20 11:25	10/19/20 16:55	
310-193402-3	MW-302A	Water	10/16/20 09:55	10/19/20 16:55	
310-193402-4	MW-303	Water	10/16/20 08:24	10/19/20 16:55	
310-193402-5	MW-304	Water	10/15/20 17:57	10/19/20 16:55	
310-193402-6	MW-305	Water	10/15/20 11:15	10/19/20 16:55	
310-193402-7	MW-306	Water	10/15/20 09:50	10/19/20 16:55	
310-193402-8	MW-307	Water	10/15/20 08:27	10/19/20 16:55	
310-193402-9	MW-307A	Water	10/14/20 17:00	10/19/20 16:55	
310-193402-10	MW-308	Water	10/14/20 15:35	10/19/20 16:55	
310-193402-11	MW-309	Water	10/14/20 14:07	10/19/20 16:55	
310-193402-12	MW-310	Water	10/14/20 11:12	10/19/20 16:55	
310-193402-13	MW-310A	Water	10/16/20 13:50	10/19/20 16:55	
310-193402-14	MW-311	Water	10/14/20 12:35	10/19/20 16:55	
310-193402-15	MW-312	Water	10/15/20 13:08	10/19/20 16:55	
310-193402-16	MW-313	Water	10/15/20 14:27	10/19/20 16:55	
310-193402-17	MW-313A	Water	10/15/20 16:15	10/19/20 16:55	
310-193402-18	Field Blank	Water	10/16/20 13:15	10/19/20 16:55	

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-301

Lab Sample ID: 310-193402-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	34000		100	50	ug/L	1		6020A	Total/NA
Magnesium	63000		500	100	ug/L	1		6020A	Total/NA
Manganese	12000		100	40	ug/L	10		6020A	Total/NA
Potassium	4100		500	150	ug/L	1		6020A	Total/NA
Sodium	45000		1000	810	ug/L	1		6020A	Total/NA
Iron	34000		100	50	ug/L	1		6020A	Dissolved
Manganese	13000		100	40	ug/L	10		6020A	Dissolved
Molybdenum	66		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	760		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	760		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-302

Lab Sample ID: 310-193402-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	2900		100	50	ug/L	1		6020A	Total/NA
Magnesium	18000		500	100	ug/L	1		6020A	Total/NA
Manganese	1400		10	4.0	ug/L	1		6020A	Total/NA
Potassium	12000		500	150	ug/L	1		6020A	Total/NA
Sodium	24000		1000	810	ug/L	1		6020A	Total/NA
Iron	3200		100	50	ug/L	1		6020A	Dissolved
Lithium	64		10	2.5	ug/L	1		6020A	Dissolved
Manganese	1600		10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	240		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	240		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-302A

Lab Sample ID: 310-193402-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	8400		100	50	ug/L	1		6020A	Total/NA
Magnesium	28000		500	100	ug/L	1		6020A	Total/NA
Manganese	3600		10	4.0	ug/L	1		6020A	Total/NA
Potassium	3600		500	150	ug/L	1		6020A	Total/NA
Sodium	34000		1000	810	ug/L	1		6020A	Total/NA
Iron	8600		100	50	ug/L	1		6020A	Dissolved
Manganese	3800		10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	150		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	150		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-303

Lab Sample ID: 310-193402-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	8500		100	50	ug/L	1		6020A	Total/NA
Magnesium	21000		500	100	ug/L	1		6020A	Total/NA
Manganese	3700		10	4.0	ug/L	1		6020A	Total/NA
Potassium	22000		500	150	ug/L	1		6020A	Total/NA
Sodium	30000		1000	810	ug/L	1		6020A	Total/NA
Iron	8700		100	50	ug/L	1		6020A	Dissolved
Lithium	59		10	2.5	ug/L	1		6020A	Dissolved
Manganese	3900		10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	85		2.0	1.1	ug/L	1		6020A	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-303 (Continued)

Lab Sample ID: 310-193402-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	290		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	290		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-304

Lab Sample ID: 310-193402-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	660		400	200	ug/L	4		6020A	Total/NA
Magnesium	3800		2000	400	ug/L	4		6020A	Total/NA
Manganese	380		40	16	ug/L	4		6020A	Total/NA
Potassium	14000		2000	600	ug/L	4		6020A	Total/NA
Sodium	51000		4000	3200	ug/L	4		6020A	Total/NA
Iron	720		100	50	ug/L	1		6020A	Dissolved
Lithium	93		10	2.5	ug/L	1		6020A	Dissolved
Manganese	440		10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	140		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	130		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	130		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-305

Lab Sample ID: 310-193402-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3000		100	50	ug/L	1		6020A	Total/NA
Magnesium	26000		500	100	ug/L	1		6020A	Total/NA
Manganese	2800		10	4.0	ug/L	1		6020A	Total/NA
Potassium	5700		500	150	ug/L	1		6020A	Total/NA
Sodium	54000		1000	810	ug/L	1		6020A	Total/NA
Iron	3000		100	50	ug/L	1		6020A	Dissolved
Manganese	2900		10	4.0	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	470		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	470		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-306

Lab Sample ID: 310-193402-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	5.4	J	10	4.0	ug/L	1		6020A	Total/NA
Potassium	20000		500	150	ug/L	1		6020A	Total/NA
Sodium	46000		1000	810	ug/L	1		6020A	Total/NA
Lithium	42		10	2.5	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	52		10	3.8	mg/L	1		SM 2320B	Total/NA
Carbonate Alkalinity as CaCO3	82		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	130		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-307

Lab Sample ID: 310-193402-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	6.4	J	10	4.0	ug/L	1		6020A	Total/NA
Potassium	36000		500	150	ug/L	1		6020A	Total/NA
Sodium	54000		1000	810	ug/L	1		6020A	Total/NA
Lithium	50		10	2.5	ug/L	1		6020A	Dissolved
Manganese	6.6	J	10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	140		2.0	1.1	ug/L	1		6020A	Dissolved
Carbonate Alkalinity as CaCO3	79		5.0	1.9	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	84		5.0	1.9	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-307A

Lab Sample ID: 310-193402-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	610		100	50	ug/L	1		6020A	Total/NA
Magnesium	1700		500	100	ug/L	1		6020A	Total/NA
Manganese	430		10	4.0	ug/L	1		6020A	Total/NA
Potassium	3100		500	150	ug/L	1		6020A	Total/NA
Sodium	110000		1000	810	ug/L	1		6020A	Total/NA
Iron	460		100	50	ug/L	1		6020A	Dissolved
Manganese	420		10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	110		5.0	1.9	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	110		5.0	1.9	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-308

Lab Sample ID: 310-193402-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	1700		500	100	ug/L	1		6020A	Total/NA
Manganese	280		10	4.0	ug/L	1		6020A	Total/NA
Potassium	35000		500	150	ug/L	1		6020A	Total/NA
Sodium	84000		1000	810	ug/L	1		6020A	Total/NA
Lithium	53		10	2.5	ug/L	1		6020A	Dissolved
Manganese	290		10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	110		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	54		5.0	1.9	mg/L	1		SM 2320B	Total/NA
Carbonate Alkalinity as CaCO3	89		5.0	1.9	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	140		5.0	1.9	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-309

Lab Sample ID: 310-193402-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	12000		100	50	ug/L	1		6020A	Total/NA
Magnesium	18000		500	100	ug/L	1		6020A	Total/NA
Manganese	3200		10	4.0	ug/L	1		6020A	Total/NA
Potassium	1800		500	150	ug/L	1		6020A	Total/NA
Sodium	90000		1000	810	ug/L	1		6020A	Total/NA
Iron	11000		100	50	ug/L	1		6020A	Dissolved
Manganese	3400		10	4.0	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	190		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	190		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-310

Lab Sample ID: 310-193402-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	18000		100	50	ug/L	1		6020A	Total/NA
Magnesium	24000		500	100	ug/L	1		6020A	Total/NA
Manganese	4400		10	4.0	ug/L	1		6020A	Total/NA
Potassium	2700		500	150	ug/L	1		6020A	Total/NA
Sodium	13000		1000	810	ug/L	1		6020A	Total/NA
Iron	16000		100	50	ug/L	1		6020A	Dissolved
Manganese	4000		10	4.0	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	330		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	330		10	3.8	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-310A

Lab Sample ID: 310-193402-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1600		100	50	ug/L	1		6020A	Total/NA
Magnesium	25000		500	100	ug/L	1		6020A	Total/NA
Manganese	470		10	4.0	ug/L	1		6020A	Total/NA
Potassium	6900		500	150	ug/L	1		6020A	Total/NA
Sodium	140000		1000	810	ug/L	1		6020A	Total/NA
Manganese	420		10	4.0	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	410		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	410		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-311

Lab Sample ID: 310-193402-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	16000		100	50	ug/L	1		6020A	Total/NA
Magnesium	30000		500	100	ug/L	1		6020A	Total/NA
Manganese	4200		10	4.0	ug/L	1		6020A	Total/NA
Potassium	2300		500	150	ug/L	1		6020A	Total/NA
Sodium	36000		1000	810	ug/L	1		6020A	Total/NA
Iron	16000		100	50	ug/L	1		6020A	Dissolved
Manganese	4300		10	4.0	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	380		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	380		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-312

Lab Sample ID: 310-193402-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	11000		100	50	ug/L	1		6020A	Total/NA
Magnesium	12000		500	100	ug/L	1		6020A	Total/NA
Manganese	7900		40	16	ug/L	4		6020A	Total/NA
Potassium	11000		500	150	ug/L	1		6020A	Total/NA
Sodium	73000		1000	810	ug/L	1		6020A	Total/NA
Iron	11000		100	50	ug/L	1		6020A	Dissolved
Manganese	8200		70	28	ug/L	7		6020A	Dissolved
Molybdenum	300		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	240		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	240		10	3.8	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-313

Lab Sample ID: 310-193402-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	15000		100	50	ug/L	1		6020A	Total/NA
Magnesium	21000		500	100	ug/L	1		6020A	Total/NA
Manganese	6100		40	16	ug/L	4		6020A	Total/NA
Potassium	14000		500	150	ug/L	1		6020A	Total/NA
Sodium	58000		1000	810	ug/L	1		6020A	Total/NA
Iron	14000		100	50	ug/L	1		6020A	Dissolved
Lithium	53		10	2.5	ug/L	1		6020A	Dissolved
Manganese	6300		40	16	ug/L	4		6020A	Dissolved
Molybdenum	100		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	380		10	3.8	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	380		10	3.8	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Detection Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Client Sample ID: MW-313A

Lab Sample ID: 310-193402-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1600		100	50	ug/L	1		6020A	Total/NA
Magnesium	4300		500	100	ug/L	1		6020A	Total/NA
Manganese	670		10	4.0	ug/L	1		6020A	Total/NA
Potassium	12000		500	150	ug/L	1		6020A	Total/NA
Sodium	160000		1000	810	ug/L	1		6020A	Total/NA
Iron	1700		100	50	ug/L	1		6020A	Dissolved
Manganese	680		10	4.0	ug/L	1		6020A	Dissolved
Molybdenum	120		2.0	1.1	ug/L	1		6020A	Dissolved
Bicarbonate Alkalinity as CaCO3	88		5.0	1.9	mg/L	1		SM 2320B	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	88		5.0	1.9	mg/L	1		SM 2320B	Total/NA

Client Sample ID: Field Blank

Lab Sample ID: 310-193402-18

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Cedar Falls

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-301
 Date Collected: 10/16/20 12:47
 Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-1
 Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	34000		100	50	ug/L		10/20/20 08:42	10/28/20 19:42	1
Magnesium	63000		500	100	ug/L		10/20/20 08:42	10/28/20 19:42	1
Manganese	12000		100	40	ug/L		10/20/20 08:42	10/29/20 13:10	10
Potassium	4100		500	150	ug/L		10/20/20 08:42	10/28/20 19:42	1
Sodium	45000		1000	810	ug/L		10/20/20 08:42	10/28/20 19:42	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	34000		100	50	ug/L		10/20/20 08:45	10/27/20 23:10	1
Manganese	13000		100	40	ug/L		10/20/20 08:45	10/28/20 14:59	10
Molybdenum	66		2.0	1.1	ug/L		10/20/20 08:45	10/27/20 23:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	760		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	760		10	3.8	mg/L			10/29/20 09:48	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-302

Lab Sample ID: 310-193402-2

Date Collected: 10/16/20 11:25

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2900		100	50	ug/L		10/20/20 08:42	10/28/20 19:53	1
Magnesium	18000		500	100	ug/L		10/20/20 08:42	10/28/20 19:53	1
Manganese	1400		10	4.0	ug/L		10/20/20 08:42	10/28/20 19:53	1
Potassium	12000		500	150	ug/L		10/20/20 08:42	10/28/20 19:53	1
Sodium	24000		1000	810	ug/L		10/20/20 08:42	10/28/20 19:53	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3200		100	50	ug/L		10/20/20 08:45	10/27/20 23:23	1
Lithium	64		10	2.5	ug/L		10/20/20 08:45	10/27/20 23:23	1
Manganese	1600		10	4.0	ug/L		10/20/20 08:45	10/27/20 23:23	1
Molybdenum	120		2.0	1.1	ug/L		10/20/20 08:45	10/27/20 23:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	240		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	240		10	3.8	mg/L			10/29/20 09:48	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-302A

Lab Sample ID: 310-193402-3

Date Collected: 10/16/20 09:55

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	8400		100	50	ug/L		10/20/20 08:42	10/28/20 20:06	1
Magnesium	28000		500	100	ug/L		10/20/20 08:42	10/28/20 20:06	1
Manganese	3600		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:06	1
Potassium	3600		500	150	ug/L		10/20/20 08:42	10/28/20 20:06	1
Sodium	34000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:06	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	8600		100	50	ug/L		10/20/20 08:45	10/27/20 23:27	1
Manganese	3800		10	4.0	ug/L		10/20/20 08:45	10/27/20 23:27	1
Molybdenum	120		2.0	1.1	ug/L		10/20/20 08:45	10/27/20 23:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	150		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	150		10	3.8	mg/L			10/29/20 09:48	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-303
 Date Collected: 10/16/20 08:24
 Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-4
 Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	8500		100	50	ug/L		10/20/20 08:42	10/28/20 20:08	1
Magnesium	21000		500	100	ug/L		10/20/20 08:42	10/28/20 20:08	1
Manganese	3700		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:08	1
Potassium	22000		500	150	ug/L		10/20/20 08:42	10/28/20 20:08	1
Sodium	30000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:08	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	8700		100	50	ug/L		10/20/20 08:45	10/27/20 23:44	1
Lithium	59		10	2.5	ug/L		10/20/20 08:45	10/27/20 23:44	1
Manganese	3900		10	4.0	ug/L		10/20/20 08:45	10/27/20 23:44	1
Molybdenum	85		2.0	1.1	ug/L		10/20/20 08:45	10/27/20 23:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	290		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	290		10	3.8	mg/L			10/29/20 09:48	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-304

Lab Sample ID: 310-193402-5

Date Collected: 10/15/20 17:57

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	660		400	200	ug/L		10/20/20 08:42	10/29/20 13:37	4
Magnesium	3800		2000	400	ug/L		10/20/20 08:42	10/29/20 13:37	4
Manganese	380		40	16	ug/L		10/20/20 08:42	10/29/20 13:37	4
Potassium	14000		2000	600	ug/L		10/20/20 08:42	10/29/20 13:37	4
Sodium	51000		4000	3200	ug/L		10/20/20 08:42	10/29/20 13:37	4

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	720		100	50	ug/L		10/20/20 08:45	10/27/20 23:47	1
Lithium	93		10	2.5	ug/L		10/20/20 08:45	10/27/20 23:47	1
Manganese	440		10	4.0	ug/L		10/20/20 08:45	10/27/20 23:47	1
Molybdenum	140		2.0	1.1	ug/L		10/20/20 08:45	10/27/20 23:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	130		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	130		10	3.8	mg/L			10/29/20 09:48	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-305

Lab Sample ID: 310-193402-6

Date Collected: 10/15/20 11:15

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3000		100	50	ug/L		10/20/20 08:42	10/28/20 20:13	1
Magnesium	26000		500	100	ug/L		10/20/20 08:42	10/28/20 20:13	1
Manganese	2800		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:13	1
Potassium	5700		500	150	ug/L		10/20/20 08:42	10/28/20 20:13	1
Sodium	54000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:13	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3000		100	50	ug/L		10/20/20 08:45	10/27/20 23:51	1
Manganese	2900		10	4.0	ug/L		10/20/20 08:45	10/27/20 23:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	470		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	470		10	3.8	mg/L			10/29/20 09:48	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-306

Lab Sample ID: 310-193402-7

Date Collected: 10/15/20 09:50

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:42	10/28/20 20:16	1
Magnesium	<100		500	100	ug/L		10/20/20 08:42	10/28/20 20:16	1
Manganese	5.4	J	10	4.0	ug/L		10/20/20 08:42	10/28/20 20:16	1
Potassium	20000		500	150	ug/L		10/20/20 08:42	10/28/20 20:16	1
Sodium	46000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:16	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:45	10/27/20 23:54	1
Lithium	42		10	2.5	ug/L		10/20/20 08:45	10/27/20 23:54	1
Manganese	<4.0		10	4.0	ug/L		10/20/20 08:45	10/27/20 23:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	52		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	82		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	130		10	3.8	mg/L			10/29/20 09:48	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-307

Lab Sample ID: 310-193402-8

Date Collected: 10/15/20 08:27

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:42	10/28/20 20:19	1
Magnesium	<100		500	100	ug/L		10/20/20 08:42	10/28/20 20:19	1
Manganese	6.4	J	10	4.0	ug/L		10/20/20 08:42	10/28/20 20:19	1
Potassium	36000		500	150	ug/L		10/20/20 08:42	10/28/20 20:19	1
Sodium	54000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:19	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:45	10/27/20 23:57	1
Lithium	50		10	2.5	ug/L		10/20/20 08:45	10/27/20 23:57	1
Manganese	6.6	J	10	4.0	ug/L		10/20/20 08:45	10/27/20 23:57	1
Molybdenum	140		2.0	1.1	ug/L		10/20/20 08:45	10/27/20 23:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/27/20 13:18	1
Carbonate Alkalinity as CaCO3	79		5.0	1.9	mg/L			10/27/20 13:18	1
Total Alkalinity as CaCO3 to pH 4.5	84		5.0	1.9	mg/L			10/27/20 13:18	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-307A

Lab Sample ID: 310-193402-9

Date Collected: 10/14/20 17:00

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	610		100	50	ug/L		10/20/20 08:42	10/28/20 20:21	1
Magnesium	1700		500	100	ug/L		10/20/20 08:42	10/28/20 20:21	1
Manganese	430		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:21	1
Potassium	3100		500	150	ug/L		10/20/20 08:42	10/28/20 20:21	1
Sodium	110000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:21	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	460		100	50	ug/L		10/20/20 08:45	10/28/20 00:01	1
Manganese	420		10	4.0	ug/L		10/20/20 08:45	10/28/20 00:01	1
Molybdenum	120		2.0	1.1	ug/L		10/20/20 08:45	10/28/20 00:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	110		5.0	1.9	mg/L			10/26/20 10:19	1
Carbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/26/20 10:19	1
Total Alkalinity as CaCO3 to pH 4.5	110		5.0	1.9	mg/L			10/26/20 10:19	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-308

Lab Sample ID: 310-193402-10

Date Collected: 10/14/20 15:35

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:42	10/28/20 20:24	1
Magnesium	1700		500	100	ug/L		10/20/20 08:42	10/28/20 20:24	1
Manganese	280		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:24	1
Potassium	35000		500	150	ug/L		10/20/20 08:42	10/28/20 20:24	1
Sodium	84000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:24	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:45	10/28/20 00:04	1
Lithium	53		10	2.5	ug/L		10/20/20 08:45	10/28/20 00:04	1
Manganese	290		10	4.0	ug/L		10/20/20 08:45	10/28/20 00:04	1
Molybdenum	110		2.0	1.1	ug/L		10/20/20 08:45	10/28/20 00:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	54		5.0	1.9	mg/L			10/26/20 10:19	1
Carbonate Alkalinity as CaCO3	89		5.0	1.9	mg/L			10/26/20 10:19	1
Total Alkalinity as CaCO3 to pH 4.5	140		5.0	1.9	mg/L			10/26/20 10:19	1



Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-309
 Date Collected: 10/14/20 14:07
 Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-11
 Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	12000		100	50	ug/L		10/20/20 08:42	10/28/20 20:27	1
Magnesium	18000		500	100	ug/L		10/20/20 08:42	10/28/20 20:27	1
Manganese	3200		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:27	1
Potassium	1800		500	150	ug/L		10/20/20 08:42	10/28/20 20:27	1
Sodium	90000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:27	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	11000		100	50	ug/L		10/20/20 08:45	10/28/20 00:08	1
Manganese	3400		10	4.0	ug/L		10/20/20 08:45	10/28/20 00:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	190		10	3.8	mg/L			10/27/20 11:15	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/27/20 11:15	1
Total Alkalinity as CaCO3 to pH 4.5	190		10	3.8	mg/L			10/27/20 11:15	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-310
 Date Collected: 10/14/20 11:12
 Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-12
 Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	18000		100	50	ug/L		10/20/20 08:42	10/28/20 20:42	1
Magnesium	24000		500	100	ug/L		10/20/20 08:42	10/28/20 20:42	1
Manganese	4400		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:42	1
Potassium	2700		500	150	ug/L		10/20/20 08:42	10/28/20 20:42	1
Sodium	13000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:42	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	16000		100	50	ug/L		10/20/20 08:45	10/28/20 00:15	1
Manganese	4000		10	4.0	ug/L		10/20/20 08:45	10/28/20 00:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	330		10	3.8	mg/L			10/27/20 11:15	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/27/20 11:15	1
Total Alkalinity as CaCO3 to pH 4.5	330		10	3.8	mg/L			10/27/20 11:15	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-310A

Lab Sample ID: 310-193402-13

Date Collected: 10/16/20 13:50

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1600		100	50	ug/L		10/20/20 08:42	10/28/20 20:45	1
Magnesium	25000		500	100	ug/L		10/20/20 08:42	10/28/20 20:45	1
Manganese	470		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:45	1
Potassium	6900		500	150	ug/L		10/20/20 08:42	10/28/20 20:45	1
Sodium	140000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:45	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/23/20 08:00	10/24/20 19:51	1
Manganese	420		10	4.0	ug/L		10/23/20 08:00	10/24/20 19:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	410		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	410		10	3.8	mg/L			10/29/20 09:48	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-311
 Date Collected: 10/14/20 12:35
 Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-14
 Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	16000		100	50	ug/L		10/20/20 08:42	10/28/20 20:48	1
Magnesium	30000		500	100	ug/L		10/20/20 08:42	10/28/20 20:48	1
Manganese	4200		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:48	1
Potassium	2300		500	150	ug/L		10/20/20 08:42	10/28/20 20:48	1
Sodium	36000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:48	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	16000		100	50	ug/L		10/20/20 08:45	10/28/20 00:32	1
Manganese	4300		10	4.0	ug/L		10/20/20 08:45	10/28/20 00:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	380		10	3.8	mg/L			10/27/20 11:15	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/27/20 11:15	1
Total Alkalinity as CaCO3 to pH 4.5	380		10	3.8	mg/L			10/27/20 11:15	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-312
 Date Collected: 10/15/20 13:08
 Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-15
 Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	11000		100	50	ug/L		10/20/20 08:42	10/28/20 20:50	1
Magnesium	12000		500	100	ug/L		10/20/20 08:42	10/28/20 20:50	1
Manganese	7900		40	16	ug/L		10/20/20 08:42	10/29/20 14:16	4
Potassium	11000		500	150	ug/L		10/20/20 08:42	10/28/20 20:50	1
Sodium	73000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:50	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	11000		100	50	ug/L		10/20/20 08:45	10/28/20 00:35	1
Manganese	8200		70	28	ug/L		10/20/20 08:45	10/28/20 15:07	7
Molybdenum	300		2.0	1.1	ug/L		10/20/20 08:45	10/28/20 00:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	240		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	240		10	3.8	mg/L			10/29/20 09:48	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-313

Lab Sample ID: 310-193402-16

Date Collected: 10/15/20 14:27

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	15000		100	50	ug/L		10/20/20 08:42	10/28/20 20:53	1
Magnesium	21000		500	100	ug/L		10/20/20 08:42	10/28/20 20:53	1
Manganese	6100		40	16	ug/L		10/20/20 08:42	10/29/20 14:19	4
Potassium	14000		500	150	ug/L		10/20/20 08:42	10/28/20 20:53	1
Sodium	58000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:53	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	14000		100	50	ug/L		10/20/20 08:45	10/28/20 00:38	1
Lithium	53		10	2.5	ug/L		10/20/20 08:45	10/28/20 00:38	1
Manganese	6300		40	16	ug/L		10/20/20 08:45	10/28/20 15:09	4
Molybdenum	100		2.0	1.1	ug/L		10/20/20 08:45	10/28/20 00:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	380		10	3.8	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<3.8		10	3.8	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	380		10	3.8	mg/L			10/29/20 09:48	1

Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-313A

Lab Sample ID: 310-193402-17

Date Collected: 10/15/20 16:15

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1600		100	50	ug/L		10/20/20 08:42	10/28/20 20:55	1
Magnesium	4300		500	100	ug/L		10/20/20 08:42	10/28/20 20:55	1
Manganese	670		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:55	1
Potassium	12000		500	150	ug/L		10/20/20 08:42	10/28/20 20:55	1
Sodium	160000		1000	810	ug/L		10/20/20 08:42	10/28/20 20:55	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1700		100	50	ug/L		10/20/20 08:45	10/28/20 00:42	1
Manganese	680		10	4.0	ug/L		10/20/20 08:45	10/28/20 00:42	1
Molybdenum	120		2.0	1.1	ug/L		10/20/20 08:45	10/28/20 00:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	88		5.0	1.9	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	88		5.0	1.9	mg/L			10/29/20 09:48	1

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Client Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: Field Blank

Lab Sample ID: 310-193402-18

Date Collected: 10/16/20 13:15

Matrix: Water

Date Received: 10/19/20 16:55

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:42	10/28/20 20:58	1
Magnesium	<100		500	100	ug/L		10/20/20 08:42	10/28/20 20:58	1
Manganese	<4.0		10	4.0	ug/L		10/20/20 08:42	10/28/20 20:58	1
Potassium	<150		500	150	ug/L		10/20/20 08:42	10/28/20 20:58	1
Sodium	<810		1000	810	ug/L		10/20/20 08:42	10/28/20 20:58	1

Method: 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:45	10/28/20 00:45	1
Manganese	<4.0		10	4.0	ug/L		10/20/20 08:45	10/28/20 00:45	1
Molybdenum	<1.1		2.0	1.1	ug/L		10/20/20 08:45	10/28/20 00:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 14:18	1
Carbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 14:18	1
Total Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 14:18	1

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Definitions/Glossary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 310-296240/1-A
Matrix: Water
Analysis Batch: 297469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296240

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/20/20 08:42	10/28/20 19:35	1
Magnesium	<100		500	100	ug/L		10/20/20 08:42	10/28/20 19:35	1
Manganese	<4.0		10	4.0	ug/L		10/20/20 08:42	10/28/20 19:35	1
Potassium	<150		500	150	ug/L		10/20/20 08:42	10/28/20 19:35	1
Sodium	<810		1000	810	ug/L		10/20/20 08:42	10/28/20 19:35	1

Lab Sample ID: LCS 310-296240/2-A
Matrix: Water
Analysis Batch: 297469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	200	212		ug/L		106	80 - 120
Magnesium	2000	2050		ug/L		103	80 - 120
Manganese	100	101		ug/L		101	80 - 120
Potassium	2000	2040		ug/L		102	80 - 120
Sodium	2000	2160		ug/L		108	80 - 120

Lab Sample ID: 310-193402-1 MS
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	34000		200	34400	4	ug/L		144	75 - 125
Magnesium	63000		2000	63600	4	ug/L		38	75 - 125
Potassium	4100		2000	6170		ug/L		106	75 - 125
Sodium	45000		2000	46500	4	ug/L		63	75 - 125

Lab Sample ID: 310-193402-1 MS
Matrix: Water
Analysis Batch: 297560

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	12000		100	11800	4	ug/L		-315	75 - 125

Lab Sample ID: 310-193402-1 MSD
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	34000		200	34000	4	ug/L		-100	75 - 125	1	20
Magnesium	63000		2000	63900	4	ug/L		52	75 - 125	0	20
Potassium	4100		2000	6090		ug/L		102	75 - 125	1	20
Sodium	45000		2000	46100	4	ug/L		40	75 - 125	1	20

Lab Sample ID: 310-193402-1 MSD
Matrix: Water
Analysis Batch: 297560

Client Sample ID: MW-301
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	12000		100	11100	4	ug/L		-1061	75 - 125	7	20

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QC Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 310-193402-11 DU
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-309
Prep Type: Total/NA
Prep Batch: 296240

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Iron	12000		12600		ug/L		5	20
Magnesium	18000		18600		ug/L		3	20
Manganese	3200		3330		ug/L		4	20
Potassium	1800		1820		ug/L		0.9	20
Sodium	90000		92100		ug/L		2	20

Lab Sample ID: MB 310-296242/1-A
Matrix: Water
Analysis Batch: 297289

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 296242

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
	Result	Qualifier								
Iron	<50		100	50	ug/L		10/20/20 08:45	10/27/20 23:03		1
Lithium	<2.5		10	2.5	ug/L		10/20/20 08:45	10/27/20 23:03		1
Manganese	<4.0		10	4.0	ug/L		10/20/20 08:45	10/27/20 23:03		1
Molybdenum	<1.1		2.0	1.1	ug/L		10/20/20 08:45	10/27/20 23:03		1

Lab Sample ID: LCS 310-296242/2-A
Matrix: Water
Analysis Batch: 297289

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 296242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	200	230		ug/L		115	80 - 120
Manganese	100	108		ug/L		108	80 - 120
Molybdenum	200	215		ug/L		107	80 - 120

Lab Sample ID: 310-193402-1 MS
Matrix: Water
Analysis Batch: 297289

Client Sample ID: MW-301
Prep Type: Dissolved
Prep Batch: 296242

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Iron	34000		200	34200	4	ug/L		-21	75 - 125
Lithium	10		200	212		ug/L		101	75 - 125
Molybdenum	66		200	280		ug/L		107	75 - 125

Lab Sample ID: 310-193402-1 MS
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-301
Prep Type: Dissolved
Prep Batch: 296242

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Manganese	13000		100	12500	4	ug/L		-72	75 - 125

Lab Sample ID: 310-193402-1 MSD
Matrix: Water
Analysis Batch: 297289

Client Sample ID: MW-301
Prep Type: Dissolved
Prep Batch: 296242

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Iron	34000		200	33900	4	ug/L		-161	75 - 125	1	20
Lithium	10		200	212		ug/L		101	75 - 125	0	20
Molybdenum	66		200	282		ug/L		108	75 - 125	1	20

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QC Sample Results

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 310-193402-1 MSD
Matrix: Water
Analysis Batch: 297469

Client Sample ID: MW-301
Prep Type: Dissolved
Prep Batch: 296242

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	13000		100	12500	4	ug/L		-80	75 - 125	0	20

Lab Sample ID: 310-193402-11 DU
Matrix: Water
Analysis Batch: 297289

Client Sample ID: MW-309
Prep Type: Dissolved
Prep Batch: 296242

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	11000		11200		ug/L		1	20
Lithium	<2.5		2.69	J	ug/L		NC	20
Manganese	3400		3370		ug/L		1	20
Molybdenum	100		101		ug/L		0.6	20

Lab Sample ID: MB 310-296490/1-B
Matrix: Water
Analysis Batch: 296969

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 296653

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<50		100	50	ug/L		10/23/20 08:00	10/24/20 19:03	1
Manganese	<4.0		10	4.0	ug/L		10/23/20 08:00	10/24/20 19:03	1

Lab Sample ID: LCS 310-296490/2-B
Matrix: Water
Analysis Batch: 296969

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 296653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	200	200		ug/L		100	80 - 120
Manganese	100	96.1		ug/L		96	80 - 120

Method: 2320B - Alkalinity (Low Level)

Lab Sample ID: MB 310-297552/1
Matrix: Water
Analysis Batch: 297552

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 14:15	1
Carbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 14:15	1
Total Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 14:15	1

Lab Sample ID: LCS 310-297552/2
Matrix: Water
Analysis Batch: 297552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	1000	989		mg/L		99	90 - 110

QC Sample Results

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 310-296998/1
Matrix: Water
Analysis Batch: 296998

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/26/20 10:19	1
Carbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/26/20 10:19	1
Total Alkalinity as CaCO3 to pH 4.5	<1.9		5.0	1.9	mg/L			10/26/20 10:19	1

Lab Sample ID: LCS 310-296998/2
Matrix: Water
Analysis Batch: 296998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	1000	941		mg/L		94	90 - 110

Lab Sample ID: MB 310-297205/1
Matrix: Water
Analysis Batch: 297205

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/27/20 11:15	1
Carbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/27/20 11:15	1
Total Alkalinity as CaCO3 to pH 4.5	<1.9		5.0	1.9	mg/L			10/27/20 11:15	1

Lab Sample ID: LCS 310-297205/2
Matrix: Water
Analysis Batch: 297205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	1000	990		mg/L		99	90 - 110

Lab Sample ID: MB 310-297506/1
Matrix: Water
Analysis Batch: 297506

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 09:48	1
Carbonate Alkalinity as CaCO3	<1.9		5.0	1.9	mg/L			10/29/20 09:48	1
Total Alkalinity as CaCO3 to pH 4.5	<1.9		5.0	1.9	mg/L			10/29/20 09:48	1

Lab Sample ID: LCS 310-297506/2
Matrix: Water
Analysis Batch: 297506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	1000	979		mg/L		98	90 - 110

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QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Metals

Prep Batch: 296240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	3010A	
310-193402-2	MW-302	Total/NA	Water	3010A	
310-193402-3	MW-302A	Total/NA	Water	3010A	
310-193402-4	MW-303	Total/NA	Water	3010A	
310-193402-5	MW-304	Total/NA	Water	3010A	
310-193402-6	MW-305	Total/NA	Water	3010A	
310-193402-7	MW-306	Total/NA	Water	3010A	
310-193402-8	MW-307	Total/NA	Water	3010A	
310-193402-9	MW-307A	Total/NA	Water	3010A	
310-193402-10	MW-308	Total/NA	Water	3010A	
310-193402-11	MW-309	Total/NA	Water	3010A	
310-193402-12	MW-310	Total/NA	Water	3010A	
310-193402-13	MW-310A	Total/NA	Water	3010A	
310-193402-14	MW-311	Total/NA	Water	3010A	
310-193402-15	MW-312	Total/NA	Water	3010A	
310-193402-16	MW-313	Total/NA	Water	3010A	
310-193402-17	MW-313A	Total/NA	Water	3010A	
310-193402-18	Field Blank	Total/NA	Water	3010A	
MB 310-296240/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-296240/2-A	Lab Control Sample	Total/NA	Water	3010A	
310-193402-1 MS	MW-301	Total/NA	Water	3010A	
310-193402-1 MSD	MW-301	Total/NA	Water	3010A	
310-193402-11 DU	MW-309	Total/NA	Water	3010A	

Prep Batch: 296242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Dissolved	Water	3010A	
310-193402-2	MW-302	Dissolved	Water	3010A	
310-193402-3	MW-302A	Dissolved	Water	3010A	
310-193402-4	MW-303	Dissolved	Water	3010A	
310-193402-5	MW-304	Dissolved	Water	3010A	
310-193402-6	MW-305	Dissolved	Water	3010A	
310-193402-7	MW-306	Dissolved	Water	3010A	
310-193402-8	MW-307	Dissolved	Water	3010A	
310-193402-9	MW-307A	Dissolved	Water	3010A	
310-193402-10	MW-308	Dissolved	Water	3010A	
310-193402-11	MW-309	Dissolved	Water	3010A	
310-193402-12	MW-310	Dissolved	Water	3010A	
310-193402-14	MW-311	Dissolved	Water	3010A	
310-193402-15	MW-312	Dissolved	Water	3010A	
310-193402-16	MW-313	Dissolved	Water	3010A	
310-193402-17	MW-313A	Dissolved	Water	3010A	
310-193402-18	Field Blank	Dissolved	Water	3010A	
MB 310-296242/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-296242/2-A	Lab Control Sample	Total/NA	Water	3010A	
310-193402-1 MS	MW-301	Dissolved	Water	3010A	
310-193402-1 MSD	MW-301	Dissolved	Water	3010A	
310-193402-11 DU	MW-309	Dissolved	Water	3010A	

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QC Association Summary

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Metals

Filtration Batch: 296490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-13	MW-310A	Dissolved	Water	Filtration	
MB 310-296490/1-B	Method Blank	Dissolved	Water	Filtration	
LCS 310-296490/2-B	Lab Control Sample	Dissolved	Water	Filtration	

Prep Batch: 296653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-13	MW-310A	Dissolved	Water	3010A	296490
MB 310-296490/1-B	Method Blank	Dissolved	Water	3010A	296490
LCS 310-296490/2-B	Lab Control Sample	Dissolved	Water	3010A	296490

Analysis Batch: 296969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-13	MW-310A	Dissolved	Water	6020A	296653
MB 310-296490/1-B	Method Blank	Dissolved	Water	6020A	296653
LCS 310-296490/2-B	Lab Control Sample	Dissolved	Water	6020A	296653

Analysis Batch: 297289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Dissolved	Water	6020A	296242
310-193402-2	MW-302	Dissolved	Water	6020A	296242
310-193402-3	MW-302A	Dissolved	Water	6020A	296242
310-193402-4	MW-303	Dissolved	Water	6020A	296242
310-193402-5	MW-304	Dissolved	Water	6020A	296242
310-193402-6	MW-305	Dissolved	Water	6020A	296242
310-193402-7	MW-306	Dissolved	Water	6020A	296242
310-193402-8	MW-307	Dissolved	Water	6020A	296242
310-193402-9	MW-307A	Dissolved	Water	6020A	296242
310-193402-10	MW-308	Dissolved	Water	6020A	296242
310-193402-11	MW-309	Dissolved	Water	6020A	296242
310-193402-12	MW-310	Dissolved	Water	6020A	296242
310-193402-14	MW-311	Dissolved	Water	6020A	296242
310-193402-15	MW-312	Dissolved	Water	6020A	296242
310-193402-16	MW-313	Dissolved	Water	6020A	296242
310-193402-17	MW-313A	Dissolved	Water	6020A	296242
310-193402-18	Field Blank	Dissolved	Water	6020A	296242
MB 310-296242/1-A	Method Blank	Total/NA	Water	6020A	296242
LCS 310-296242/2-A	Lab Control Sample	Total/NA	Water	6020A	296242
310-193402-1 MS	MW-301	Dissolved	Water	6020A	296242
310-193402-1 MSD	MW-301	Dissolved	Water	6020A	296242
310-193402-11 DU	MW-309	Dissolved	Water	6020A	296242

Analysis Batch: 297469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Dissolved	Water	6020A	296242
310-193402-1	MW-301	Total/NA	Water	6020A	296240
310-193402-2	MW-302	Total/NA	Water	6020A	296240
310-193402-3	MW-302A	Total/NA	Water	6020A	296240
310-193402-4	MW-303	Total/NA	Water	6020A	296240
310-193402-6	MW-305	Total/NA	Water	6020A	296240
310-193402-7	MW-306	Total/NA	Water	6020A	296240
310-193402-8	MW-307	Total/NA	Water	6020A	296240

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QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Metals (Continued)

Analysis Batch: 297469 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-9	MW-307A	Total/NA	Water	6020A	296240
310-193402-10	MW-308	Total/NA	Water	6020A	296240
310-193402-11	MW-309	Total/NA	Water	6020A	296240
310-193402-12	MW-310	Total/NA	Water	6020A	296240
310-193402-13	MW-310A	Total/NA	Water	6020A	296240
310-193402-14	MW-311	Total/NA	Water	6020A	296240
310-193402-15	MW-312	Dissolved	Water	6020A	296242
310-193402-15	MW-312	Total/NA	Water	6020A	296240
310-193402-16	MW-313	Dissolved	Water	6020A	296242
310-193402-16	MW-313	Total/NA	Water	6020A	296240
310-193402-17	MW-313A	Total/NA	Water	6020A	296240
310-193402-18	Field Blank	Total/NA	Water	6020A	296240
MB 310-296240/1-A	Method Blank	Total/NA	Water	6020A	296240
LCS 310-296240/2-A	Lab Control Sample	Total/NA	Water	6020A	296240
310-193402-1 MS	MW-301	Dissolved	Water	6020A	296242
310-193402-1 MS	MW-301	Total/NA	Water	6020A	296240
310-193402-1 MSD	MW-301	Dissolved	Water	6020A	296242
310-193402-1 MSD	MW-301	Total/NA	Water	6020A	296240
310-193402-11 DU	MW-309	Total/NA	Water	6020A	296240

Analysis Batch: 297560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	6020A	296240
310-193402-5	MW-304	Total/NA	Water	6020A	296240
310-193402-15	MW-312	Total/NA	Water	6020A	296240
310-193402-16	MW-313	Total/NA	Water	6020A	296240
310-193402-1 MS	MW-301	Total/NA	Water	6020A	296240
310-193402-1 MSD	MW-301	Total/NA	Water	6020A	296240

General Chemistry

Analysis Batch: 296998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-9	MW-307A	Total/NA	Water	SM 2320B	
310-193402-10	MW-308	Total/NA	Water	SM 2320B	
MB 310-296998/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 310-296998/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 297205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-8	MW-307	Total/NA	Water	SM 2320B	
310-193402-11	MW-309	Total/NA	Water	SM 2320B	
310-193402-12	MW-310	Total/NA	Water	SM 2320B	
310-193402-14	MW-311	Total/NA	Water	SM 2320B	
MB 310-297205/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 310-297205/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 297506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-1	MW-301	Total/NA	Water	SM 2320B	
310-193402-2	MW-302	Total/NA	Water	SM 2320B	

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QC Association Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

General Chemistry (Continued)

Analysis Batch: 297506 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-3	MW-302A	Total/NA	Water	SM 2320B	
310-193402-4	MW-303	Total/NA	Water	SM 2320B	
310-193402-5	MW-304	Total/NA	Water	SM 2320B	
310-193402-6	MW-305	Total/NA	Water	SM 2320B	
310-193402-7	MW-306	Total/NA	Water	SM 2320B	
310-193402-13	MW-310A	Total/NA	Water	SM 2320B	
310-193402-15	MW-312	Total/NA	Water	SM 2320B	
310-193402-16	MW-313	Total/NA	Water	SM 2320B	
310-193402-17	MW-313A	Total/NA	Water	SM 2320B	
MB 310-297506/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 310-297506/2	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 297552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-193402-18	Field Blank	Total/NA	Water	2320B	
MB 310-297552/1	Method Blank	Total/NA	Water	2320B	
LCS 310-297552/2	Lab Control Sample	Total/NA	Water	2320B	

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-301
Date Collected: 10/16/20 12:47
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:10	SAD	TAL CF
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		10	297469	10/28/20 14:59	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 19:42	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		10	297560	10/29/20 13:10	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-302
Date Collected: 10/16/20 11:25
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:23	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 19:53	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-302A
Date Collected: 10/16/20 09:55
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:27	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:06	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-303
Date Collected: 10/16/20 08:24
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:44	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:08	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Lab Chronicle

Client: SCS Engineers
 Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
 SDG: 25220066

Client Sample ID: MW-304
Date Collected: 10/15/20 17:57
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:47	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		4	297560	10/29/20 13:37	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-305
Date Collected: 10/15/20 11:15
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:51	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:13	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-306
Date Collected: 10/15/20 09:50
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:54	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:16	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-307
Date Collected: 10/15/20 08:27
Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/27/20 23:57	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:19	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297205	10/27/20 13:18	WJF	TAL CF

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Client Sample ID: MW-307A

Lab Sample ID: 310-193402-9

Date Collected: 10/14/20 17:00

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:01	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:21	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	296998	10/26/20 10:19	WJF	TAL CF

Client Sample ID: MW-308

Lab Sample ID: 310-193402-10

Date Collected: 10/14/20 15:35

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:04	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:24	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	296998	10/26/20 10:19	WJF	TAL CF

Client Sample ID: MW-309

Lab Sample ID: 310-193402-11

Date Collected: 10/14/20 14:07

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:08	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:27	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297205	10/27/20 11:15	WJF	TAL CF

Client Sample ID: MW-310

Lab Sample ID: 310-193402-12

Date Collected: 10/14/20 11:12

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:15	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:42	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297205	10/27/20 11:15	WJF	TAL CF

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Client Sample ID: MW-310A

Lab Sample ID: 310-193402-13

Date Collected: 10/16/20 13:50

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			296490	10/21/20 14:59	HED	TAL CF
Dissolved	Prep	3010A			296653	10/23/20 08:00	HED	TAL CF
Dissolved	Analysis	6020A		1	296969	10/24/20 19:51	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:45	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-311

Lab Sample ID: 310-193402-14

Date Collected: 10/14/20 12:35

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:32	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:48	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297205	10/27/20 11:15	WJF	TAL CF

Client Sample ID: MW-312

Lab Sample ID: 310-193402-15

Date Collected: 10/15/20 13:08

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:35	SAD	TAL CF
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		7	297469	10/28/20 15:07	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:50	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		4	297560	10/29/20 14:16	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-313

Lab Sample ID: 310-193402-16

Date Collected: 10/15/20 14:27

Matrix: Water

Date Received: 10/19/20 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:38	SAD	TAL CF
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		4	297469	10/28/20 15:09	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:53	SAD	TAL CF

Eurofins TestAmerica, Cedar Falls

Lab Chronicle

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Client Sample ID: MW-313

Date Collected: 10/15/20 14:27

Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		4	297560	10/29/20 14:19	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: MW-313A

Date Collected: 10/15/20 16:15

Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:42	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:55	SAD	TAL CF
Total/NA	Analysis	SM 2320B		1	297506	10/29/20 09:48	LBB	TAL CF

Client Sample ID: Field Blank

Date Collected: 10/16/20 13:15

Date Received: 10/19/20 16:55

Lab Sample ID: 310-193402-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3010A			296242	10/20/20 08:45	HED	TAL CF
Dissolved	Analysis	6020A		1	297289	10/28/20 00:45	SAD	TAL CF
Total/NA	Prep	3010A			296240	10/20/20 08:42	HED	TAL CF
Total/NA	Analysis	6020A		1	297469	10/28/20 20:58	SAD	TAL CF
Total/NA	Analysis	2320B		1	297552	10/29/20 14:18	LBB	TAL CF

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Laboratory: Eurofins TestAmerica, Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-21

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: SCS Engineers
Project/Site: Burlington Gen Station - 25220066

Job ID: 310-193402-3
SDG: 25220066

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL CF
2320B	Alkalinity (Low Level)	SM	TAL CF
SM 2320B	Alkalinity	SM	TAL CF
3010A	Preparation, Total Metals	SW846	TAL CF
Filtration	Sample Filtration	None	TAL CF

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401





310-193402 Chain of Custody

Cooler/Sample Receipt and Temperature

Client Information:			
Client: <u>SCS Eng.</u>			
City/State:	CITY <u>Clive</u>	STATE <u>IA</u>	Project: <u>Burly In</u>
Receipt Information:			
Date/Time Received:	DATE <u>10-19-20</u>	TIME <u>1655</u>	Received By: <u>JB</u>
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee			
<input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Goods/Container:			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>1</u> of <u>2</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record:			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____	<input type="checkbox"/> NONE	
Thermometer ID:	<u>N</u>	Correction Factor (°C): <u>0.0</u>	
Temp Blank Temperature: If no temp blank or temp blank temperature above criteria, proceed to Sample Container Temperature.			
Uncorrected Temp (°C):	<u>-0.6</u>	Corrected Temp (°C): <u>-0.6</u>	
Sample Container Temperature:			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted:			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments:			
<u>Only 11L Nitric rec'd for MW-310A Also nitric container not field filtered written on bottle</u>			

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS Eng			
City/State:	CITY Clive	STATE IA	Project: Burlington
Receipt Information			
Date/Time Received:	DATE 10-19-20	TIME 1655	Received By: JB
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # <u>2</u> of <u>6</u>	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	N	Correction Factor (°C):	0.0
<small>Temp blank temperature, if no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature</small>			
Uncorrected Temp (°C):	0.2	Corrected Temp (°C):	0.2
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exception Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Cooler/Sample Receipt and Temperature Log Form

Client Information		
Client: SCS Engin.		
City/State: Clive IA	STATE: IA	Project: Burlington
Receipt Information		
Date/Time Received: 10-19-20 1655	DATE: 10-19-20	TIME: 1655
Received By: JB		
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____		
Condition of Cooler/Container		
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 3 of 6
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record		
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID: N	Correction Factor (°C): 0.0	
<small>Temp Blank Temperature: If no temp blank or temp blank temperature above criteria, proceed to Sample Container temperature.</small>		
Uncorrected Temp (°C): 1.2	Corrected Temp (°C): 1.2	
Sample Container Temperature		
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>
Uncorrected Temp (°C):		
Corrected Temp (°C):		
Exceptions Noted		
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No		
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No		
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No		
NOTE: If yes, contact PM before proceeding. If no, proceed with login		
Additional Comments		

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS Engin.			
City/State:	CITY CLIVE	STATE IA	Project: Burlington
Receipt Information			
Date/Time Received:	DATE 10-19-20	TIME 1655	Received By: AB
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 4 of 6	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID:	N	Correction Factor (°C):	0.0
<small>Temp Blank Temperature: If no temp blank or temp blank temperature above criteria, proceed to Sample Container Temperature</small>			
Uncorrected Temp (°C):		Corrected Temp (°C):	
Sample Container Temperature			
Container(s) used:	CONTAINER 1 500 mL-PI-NT	CONTAINER 2	
Uncorrected Temp (°C):	0.8		
Corrected Temp (°C):	0.8		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS			
City/State: CLIVE	STATE: IA	Project:	
Receipt Information			
Date/Time Received: 10-19-20	DATE	1655	TIME
Received By: AB			
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 5 of 6	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE			
Thermometer ID: N	Correction Factor (°C): 0.0		
Temp Blank Temperature - If no temp blank, or temp blank temperature above 6°C, proceed to Sample Container temperature.			
Uncorrected Temp (°C): 0.3	Corrected Temp (°C): 0.3		
Sample Container Temperature			
Container(s) used:	<u>CONTAINER 1</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):			
Corrected Temp (°C):			
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
a) If yes: Is there evidence that the chilling process began?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?)		<input type="checkbox"/> Yes	<input type="checkbox"/> No
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			



Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: SCS Engin.			
City/State:	CITY CLIVE	STATE IA	Project:
Receipt Information			
Date/Time Received:	DATE 10-19-20	TIME 1655	Received By: JB
Delivery Type: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input checked="" type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler # 6 of 6	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	N	Correction Factor (°C):	0.0
Temp Blank Temperature: If no temp blank or temp blank temperature above 6°C, do not proceed to Sample Container Temperature			
Uncorrected Temp (°C):		Corrected Temp (°C):	
Sample Container Temperature			
Container(s) used:	CONTAINER 1 500mL-PI-NT	CONTAINER 2	
Uncorrected Temp (°C):	2.1		
Corrected Temp (°C):	2.1		
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Chain of Custody Record

Stamp: Tanten Buzska
 Phone: 769-943-0855

Lab PM: Friedrich, Sandie
 E-Mail: sandie.friedrich@eurofinet.com

Client Information
 Client Contact: Tanten Buzska
 Company: SCS Engineers
 Address: 8450 Hickman Road Suite 2021
 City: Clive
 State, Zip: IA, 50325
 Phone: 769-943-0855
 Email: tbuzska@scsengineers.com
 Project Name: Burlington Gen Station 25220066
 Site: ↓

Due Date Requested:
 TAT Requested (days):
 PO #: 25220066
 WO #:
 Project #: 31011020
 SSOW#:

Center Tracking (Yes):
 COC No: 310-54738-16112.1
 Page: Page 1 of 2
 Job #:

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefl, B=bi-phase, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A - Metals - Hg	2540C - Calcd. 9056A_ORGM_28D_SMA571_H4	903.0 - Radium 226	904.0 - Radium 228
MW-301	10.16.20	12:47	G	Water	X	X	X	X	X	X
MW-302	10.16.20	11:25	G	Water	X	X	X	X	X	X
MW-302A	10.16.20	4:55	G	Water	X	X	X	X	X	X
MW-303	10.16.20	8:24	G	Water	X	X	X	X	X	X
MW-304	10.15.20	17:57	G	Water	X	X	X	X	X	X
MW-305	10.15.20	11:15	G	Water	X	X	X	X	X	X
MW-306	10.15.20	4:50	G	Water	X	X	X	X	X	X
MW-307	10.15.20	8:27	G	Water	X	X	X	X	X	X
MW-307A	10.14.20	17:00	G	Water	X	X	X	X	X	X
MW-308	10.14.20	15:35	G	Water	X	X	X	X	X	X
MW-309	10.14.20	14:07	G	Water	X	X	X	X	X	X

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Antichlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:

Special Instructions/Note:
 Short hold time for TDS
 9 Coolers associated with this COC

Analysis Requested
 Total Number of containers: X

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client
 Disposal By Lab
 Archive For _____ Months

Possible Hazard Identification
 Non-Hazard
 Flammable
 Skin Irritant
 Poison B
 Unknown
 Radiological

Deliverable Requested: I, II, III, IV, Other (specify)
 Empty Kit Relinquished by:
 Relinquished by: Matthew Cahalan
 Date/Time: 10/19/20 11:30
 Relinquished by:
 Date/Time:
 Relinquished by:
 Date/Time:

Method of Shipment
 Received by: JB
 Date/Time: 10-19-20 16:55
 Company: E7ACF
 Received by:
 Date/Time:
 Company:
 Received by:
 Date/Time:
 Company:
 Custody Seal No. Δ Yes Δ No
 Cooler Temperature(s) °C and Other Remarks

Client Information
 Client Contact: Tamara Buszka
 Company: SCS Engineers
 Address: 8450 Hickman Road Suite 20 21
 City: Clive
 State, Zip: IA, 50325
 Phone: 264-943-0855
 Email: tbuszka@scsengineers.com

Project Information
 Project #: 31011020
 Site: Burlington Gen Station 25220066

Sample Information
 Due Date Requested:
 TAT Requested (days):
 PO #: 25220066
 WO #:
 Sample ID: 6020A - Metals - Hg

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=water, S=solid, O=waste/oil, I=ice, F=field)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020A - Metals - Hg	2540C_Calcd, 9056A_ORGFM, 28D, 514EPM, Hg	903.0 - Radium 226	904.0 - Radium 228	Analysis Requested	Preservation Codes:	Special Instructions/Note:
MW-310	10-14-20	11:12	G	Water	X	X	X	X	X	X		M - Hexane N - None C - AsNaO2 P - Na2OAS F - NH4SO4 R - Na2SO3 G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
MW-310A	10-16-20	13:50	G	Water	X	X	X	X	X	X			Dissolved metals bottle was not filtered
MW-311	10-14-20	12:35	G	Water	X	X	X	X	X	X			Short hold time for TDS
MW-312	10-15-20	13:08	G	Water	X	X	X	X	X	X			6 coolers associated with this col
MW-313	10-15-20	14:27	G	Water	X	X	X	X	X	X			
MW-313A	10-15-20	16:15	G	Water	X	X	X	X	X	X			
Field Blank	10-16-20	13:15	G	Water	X	X	X	X	X	X			

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: Matthew Cahalan Date: 10/19/20 Time: 11:30

Relinquished by: Matthew Cahalan Date/Time: 10/19/20 11:30

Relinquished by: SCS Date/Time: 10-19-20 16:55

Relinquished by: ETACF Date/Time: 10-19-20 16:55

Custody Seal No.: Δ Yes Δ No

Special Disposal: (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Method of Shipment: _____

Company: SCS ETACF

Received by: JB ETACF

Received by: _____

Received by: _____

Cooler Temperature(s) °C and Other Remarks:

Chain of Custody Record

Client Information
 Client Contact: Tawilken Buzsika
 Company: SCS Engineers
 Address: 8450 Hickman Road Suite 211
 City: Clive
 State, Zip: IA, 50325
 Phone: 764.993-0855
 Email: tbuzsika@scsengineers.com
 Project Name: Burlington Gen Station 25220066-Additional
 Site:

Sample Information
 Sample: Tanten Buzsika
 Phone: 764.993-0855
 Lab/PIA: Friedrick, Stenalia
 E-Mail: friedrick.stenalia@eurofins.com

Carrier Tracking No(s):
 Lab No: 310-54739-16396.1
 Page: Page 1 of 2
 Job #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, etc.)	Field Filtered Sample (Yes or No)		Perform MS/SD (Yes or No)		2320B - Alkalinity - Carb/Bicarb		6020A - Metals (5)		6020A - Metals (4)		Analysis Requested	Preservation Codes	Special Instructions/Note:
					M	D	M	D	M	D	M	D	M	D			
MW-301	10-16-20	12:47	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-302	10-16-20	11:25	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-302A	10-16-20	4:55	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-303	10-16-20	8:24	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-304	10-15-20	17:57	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-305	10-15-20	11:15	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-306	10-15-20	9:50	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-307	10-15-20	8:27	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-307A	10-14-20	17:00	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-308	10-14-20	15:35	G	Water	X	X	X	X	X	X	X	X	X	X			
MW-309	10-14-20	14:07	G	Water	X	X	X	X	X	X	X	X	X	X			

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: **Matthew Catalan** Date/Time: 10/19/20 11:30
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____

Received by: **YB** Date/Time: 10-19-20 16:55
 Received by: _____ Date/Time: _____
 Received by: _____ Date/Time: _____

Company: **SCS** Company: **ETACF**
 Company: _____ Company: _____
 Company: _____ Company: _____

Custody Seal: Intact: Yes No
 Custody Seal No: _____
 Cooler Temperature(s) °C and Other Remarks: _____

Chain of Custody Record

Sample: **Tanzen Buselan**
 Client: **264-443-0855**
 Lab/ID: **Franklin, Sandie**
 E-Mail: **franklin.sandie@eurofins.com**

Time Date Requested:
 TAT Requested (days):
 PO #: **25220066**
 WO #:
 Project #: **31011020**
 SSOW #:

Client Information:
 Client Contact: **TestAmerica**
 Company: **SCS Engineers**
 Address: **8450 Hickman Road, Suite 21**
 City: **Clive**
 State, Zip: **IA, 50325**
 Phone: **264-443-0855**
 Email: **tbuszka@scsengineers.com**
 Project Name: **Burlington Gen Station 25220066-additional**
 Site: **↓**

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, I=ice, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2320B - Alkalinity - Carb/Bicarb	6020A - Metals (5)	6020A - Metals (4)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
MW-310	10-14-20	11:17	G	Water	N	N	X	X	X			
MW-310A	10-16-20	13:50	G	Water	N	N	X	X	X			Dissolved metals bottle was not filtered.
MW-311	10-14-20	12:35	G	Water	N	N	X	X	X			
MW-312	10-15-20	13:08	G	Water	N	N	X	X	X			
MW-313	10-15-20	14:27	G	Water	N	N	X	X	X			
MW-313A	10-15-20	16:15	G	Water	N	N	X	X	X			9 coolers associated with this col
Field Blank	10-16-20	13:15	G	Water	N	N	X	X	X			

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)
 Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: **Matthew Cahalan** Date: **10/14/20 1130**
 Relinquished by: _____ Date: _____
 Relinquished by: _____ Date: _____
 Custody Seal No: _____
 Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:
 Method of Shipment:
 Received by: **SCS** Date/Time: **10-19-20 1655** Company: **ETACF**
 Received by: _____ Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____
 Cooler Temperature(s) °C and Other Remarks:
 Ver: 01/16/2019

Table 1. Sampling Points and Parameters - CCR Rule Sampling Program Assessment Monitoring Groundwater Monitoring - Burlington Generating Station / SCS Engineers Project #25220066

Parameter	MW- 301	MW- 302	MW- 302A	MW- 303	MW- 304	MW- 305	MW- 306	MW- 307	MW- 307A	MW- 308	MW- 309	MW- 310	MW- 310A	MW- 311	MW- 312	MW- 313	MW- 313A	MW- 313B	Field Blank	TOTAL
Appendix III Parameters																				
Boron	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Calcium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Chloride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Fluoride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
pH	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Sulfate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
TDS	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Appendix IV Parameters																				
Antimony	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Arsenic	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Barium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Beryllium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Cadmium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Chromium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Cobalt	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Fluoride	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Lead	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Lithium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Mercury	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Molybdenum	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Selenium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Thallium																				0
Radium	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Field Parameters																				
Groundwater Elevation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Well Depth	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
pH (field)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Specific Conductance	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Dissolved Oxygen	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
ORP	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Temperature	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Turbidity	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Color	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Odor	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Additional Lab Parameters - REPORT SEPARATELY																				
Bicarbonate (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Carbonate (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Iron (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Magnesium (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Manganese (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Potassium (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Sodium (total)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Iron (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Lithium (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7
Manganese (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Molybdenum (filtered)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	11

Notes:

I:\25220066.00\Data and Calculations\Field Work Requests\[Table_1_BGS_CCR_Rule_Sampling_2010.xls]Sheet1



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 310-193402-3

SDG Number: 25220066

Login Number: 193402


List Source: Eurofins TestAmerica, Cedar Falls

List Number: 1

Creator: Homolar, Dana J

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	only 1 1L Nitric for Radium on 310A also no field filtered bottle for 310A
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





Appendix D
Historical Monitoring Records

Single Location

Name: IPL - Burlington

Location ID: MW-301																			
Number of Sampling Dates: 17																			
Parameter Name	Units	4/20/2016	6/6/2016	8/16/2016	10/3/2016	1/10/2017	4/3/2017	6/12/2017	8/16/2017	10/16/2017	5/9/2018	8/13/2018	10/9/2018	3/12/2019	4/3/2019	10/10/2019	6/3/2020	10/16/2020	
Boron	ug/L	12400	10600	13100	10500	12000	14500	10500	14000	9900	9140	12800	8040	--	12000	8100	10000	12000	
Calcium	mg/L	156	100	178	131	140	220	156	211	140	85.3	174	103	--	150	130	140	220	
Chloride	mg/L	23.3	22.4	22.3	21.6	21.3	20.7	21.5	20.8	22	22.7	21.7	21.5	--	21	20	22	20	
Fluoride	mg/L	0.55	0.29	0.43	0.3	0.37	0.36	0.23	0.45	0.27	0.36	0.52	0.26	--	0.77	<0.23	0.26	<0.23	
Field pH	Std. Units	7.27	7.65	7.53	7.61	7.41	7.37	7.36	6.89	7.58	7.4	7.91	7.34	6.38	7.53	6.85	6.99	7.07	
Sulfate	mg/L	193	170	206	378	385	215	511	327	454	188	187	358	--	190	390	250	170	
Total Dissolved Solids	mg/L	782	630	857	729	816	1020	960	1190	780	568	960	656	--	890	690	910	970	
Antimony	ug/L	0.062	0.12	0.13	0.073	<0.058	0.049	<0.026	0.2	--	<0.026	<0.15	0.08	--	<0.53	<0.53	<0.58	<0.51	
Arsenic	ug/L	39.4	35	44.1	36.9	39.7	46.1	33.4	42.7	--	34.9	40.1	37.7	--	42	40	46	54	
Barium	ug/L	381	239	406	294	343	464	380	479	--	198	420	276	--	380	320	330	500	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.046	<0.012	0.014	--	<0.012	<0.12	<0.089	--	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	0.032	<0.018	<0.018	<0.018	--	0.04	<0.07	<0.033	--	<0.077	<0.039	<0.039	<0.049	
Chromium	ug/L	0.67	0.38	0.56	<0.34	0.44	0.34	0.17	0.49	--	0.25	0.36	0.12	--	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	0.64	<0.5	0.52	<0.5	<0.5	0.57	0.16	0.46	--	0.15	0.45	0.1	--	0.44	0.18	0.31	0.7	
Lead	ug/L	0.31	<0.19	<0.19	<0.19	<0.19	0.091	0.12	0.23	--	0.17	0.13	<0.13	--	<0.27	<0.27	<0.27	<0.11	
Lithium	ug/L	10.3	11.7	<4.9	22.8	20.1	13.2	29.4	18.2	--	17.8	18.9	24.5	--	13	26	16	10	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	--	<0.1	--	<0.1	<0.1	
Molybdenum	ug/L	108	116	94.5	114	113	82.8	116	98.5	--	113	81.7	120	62.7	77	130	110	67	
Selenium	ug/L	0.34	<0.18	0.29	<0.18	<0.18	0.4	0.1	0.35	--	0.25	0.28	0.13	--	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.08	0.08	0.059	--	<0.036	--	<0.099	--	<0.27	--	<0.26	--	
Total Radium	pCi/L	1.33	0.933	2.03	0.643	0.512	1.16	1.86	1.81	--	0.712	1.15	1.5	--	1.15	1.03	0.928/0.928	1	
Radium-226	pCi/L	0.6	0.144	0.367	0	0.0709	0.347	0.901	1.14	--	0.712	0.693	0.534	--	0.411	0.498	0.553/0.553	0.57	
Radium-228	pCi/L	0.729	0.789	1.66	0.643	0.441	0.817	0.954	0.671	--	-0.016	0.459	0.966	--	0.736	0.527	<0.411/0.376	0.43	
Field Oxidation Potential	mV	-135.3	-110.7	-162.3	-156.4	-146.1	-164.7	-89.6	-90.4	38	-167.1	-145	-63.5	-73.1	-144.7	-162.9	37.1	-187.5	
Field Specific Conductance	umhos/cm	898	1702	2499	1776	1985	2507	859	1925	1065	600.8	1400	892	1055	1213	1063	1167	1503	
Field Temperature	deg C	12.6	13.2	13.5	14.1	13.6	12.9	13	13.8	13.8	12.9	16.8	17.2	12.56	12.35	13.9	13.4	13.7	
Groundwater Elevation	feet	522.63	521.07	521.81	527.48	525.38	523.08	523.21	519.96	522.13	525.51	520.19	528.01	523.38	528.15	--	523.94	519.26	
Oxygen, Dissolved	mg/L	0.09	1.12	0.11	0.5	0.1	0.12	0.17	0.05	0.12	0.08	0.35	0.24	2.61	0.59	0.23	0.25	0.09	
Turbidity	NTU	10.49	1	0.51	0.54	0.9	1.12	2.02	0.4	1.26	4.23	5.78	8.43	17.1	21.1	12.55	20.15	3.41	
pH at 25 Degrees C	Std. Units	7	7.1	7	7.2	7.2	7.4	6.9	7.1	7.2	7.2	7.2	7	--	7	7.1	7	7.8	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	760	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	34000	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13000	
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	66	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	760	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	34000	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	63000	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12000	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4100	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	45000	

Single Location

Name: IPL - Burlington

Location ID: MW-302																			
Number of Sampling Dates: 17																			
Parameter Name	Units	4/20/2016	6/6/2016	8/16/2016	10/3/2016	1/10/2017	4/3/2017	6/12/2017	8/15/2017	10/17/2017	5/9/2018	8/13/2018	10/9/2018	3/12/2019	4/3/2019	10/10/2019	6/3/2020	10/16/2020	
Boron	ug/L	8570	8400	9050	9500	9590	10100	10700	9450	10000	10200	10000	10400	--	12000	11000	13000	11000	
Calcium	mg/L	242	243	231	251	225	232	216	225	231	231	210	219	--	220	220	210	200	
Chloride	mg/L	18.3	15.2	16.1	15.4	15.2	16.6	15	15.7	16.4	14.1	14.7	13.5	--	13	11	12	10	
Fluoride	mg/L	0.11	<0.073	0.08	0.086	<0.027	<0.1	<0.1	<0.1	0.11	0.11	<0.063	<0.19	--	0.37	<0.23	<0.23	<0.23	
Field pH	Std. Units	8.17	8.06	8.3	8.24	8.22	8.71	8.06	8.38	8.72	8.19	9.32	7.89	6.94	8.7	7.49	7.88	7.87	
Sulfate	mg/L	666	525	669	579	536	540	552	512	541	553	542	658	--	510	510	490	460	
Total Dissolved Solids	mg/L	1040	1140	988	977	969	945	937	989	951	1080	1000	1030	--	1000	960	1000	910	
Antimony	ug/L	0.14	0.15	<0.058	0.096	<0.058	0.043	0.04	0.16	--	<0.026	<0.15	0.082	--	<0.53	<0.53	<0.58	<0.51	
Arsenic	ug/L	71.3	68.4	64.1	73.5	64.9	49.1	72	58.5	--	56.2	49.6	76.4	--	53	73	110	76	
Barium	ug/L	430	476	361	446	355	356	370	348	--	363	340	180	--	320	260	340	250	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.023	<0.012	0.012	--	<0.012	<0.12	<0.089	--	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	0.043	<0.029	<0.029	<0.029	<0.029	<0.018	0.021	<0.018	--	0.037	<0.07	0.04	--	<0.077	<0.039	0.045	0.11	
Chromium	ug/L	<0.34	<0.34	0.45	<0.34	0.46	0.15	0.11	0.31	--	0.22	0.33	0.097	--	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.19	0.24	0.24	--	0.19	0.15	0.18	--	0.19	0.23	0.21	0.26	
Lead	ug/L	0.21	<0.19	<0.19	<0.19	<0.19	0.058	0.064	0.22	--	0.17	<0.12	<0.13	--	0.58	<0.27	<0.27	0.17	
Lithium	ug/L	60.5	69.6	37.6	64.2	62.6	57.3	60.7	56.9	--	65.4	61.4	57.8	59.9	56	57	55	64	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	--	<0.1	--	<0.1	<0.1	
Molybdenum	ug/L	85.8	84.4	92.5	105	104	105	131	113	--	118	121	122	123	100	100	140	130	
Selenium	ug/L	0.3	0.22	0.27	0.2	<0.18	0.24	0.23	0.24	--	0.25	0.22	0.23	--	<1	<1	<1	1.1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.04	0.078	0.41	--	<0.036	--	<0.099	--	<0.27	--	<0.26	--	
Total Radium	pCi/L	1.82	1.11	0.202	1.24	1.59	1.13	1.84	1.2	--	1.51	1.53	2.15	--	0.872	0.644	0.626/0.626	0.245	
Radium-226	pCi/L	0	0.392	0	0.803	0.604	0.639	0.713	0.238	--	0.621	0.443	1.1	--	0.362	0.374	0.263/0.263	0.245	
Radium-228	pCi/L	1.82	0.715	0.202	0.439	0.987	0.494	1.13	0.962	--	0.886	1.09	1.05	--	0.51	0.27	<0.394/0.363	-0.113	
Field Oxidation Potential	mV	-181.1	-147	-167.1	-194.3	-182.6	-227.8	-154.4	-179.2	-49.7	-217.2	-237	-198	-70.3	-215.8	-186.8	36.7	-237.1	
Field Specific Conductance	umhos/cm	1032	2053	34.4	2202	2167	2037	833	1752	1165	1268	1226	1334	792	1164	1249	1245	1168	
Field Temperature	deg C	12.7	12.7	13.6	13.8	13.7	13.2	12.94	13.7	13.9	13	14.9	15.2	12.16	11.41	14.46	12.9	12.9	
Groundwater Elevation	feet	521.91	521.21	521.35	527.54	525.5	522.84	522.84	519.39	522.2	525.81	519.87	528.08	522.83	528.21	--	523.98	518.94	
Oxygen, Dissolved	mg/L	0.1	0.8	9.35	0.39	0.21	0.12	0.13	0.18	0.09	1	0.15	0.3	2.68	0.58	0.28	0.18	0.08	
Turbidity	NTU	10.65	2.56	0.19	1.36	0.47	1.99	0.59	0.25	2.04	2.25	3.75	6.48	22.1	18.8	1.16	25.27	0.07	
pH at 25 Degrees C	Std. Units	7.8	7.8	7.6	7.8	7.9	8	7.6	7.8	8	7.9	8	7.7	--	8.1	7.7	7.6	8.2	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	240	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3200	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1600	
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	120	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	240	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2900	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18000	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1400	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12000	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24000	
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	64	

Single Location

Name: IPL - Burlington

Location ID: MW-302A			
Number of Sampling Dates: 2			
Parameter Name	Units	9/9/2020	10/16/2020
Boron	ug/L	11000	11000
Calcium	mg/L	120	130
Chloride	mg/L	27	23
Fluoride	mg/L	<0.23	<0.23
Field pH	Std. Units	7.31	7.26
Sulfate	mg/L	340	330
Total Dissolved Solids	mg/L	730	710
Antimony	ug/L	<0.51	1.7
Arsenic	ug/L	2.9	2.9
Barium	ug/L	270	280
Beryllium	ug/L	<0.27	<0.27
Cadmium	ug/L	<0.049	0.065
Chromium	ug/L	<1.1	<1.1
Cobalt	ug/L	0.12	0.11
Lead	ug/L	0.11	<0.11
Lithium	ug/L	11	11
Mercury	ug/L	<0.1	<0.1
Molybdenum	ug/L	120	110
Selenium	ug/L	<1	<1
Thallium	ug/L	<0.26	--
Total Radium	pCi/L	1.15	0.785
Radium-226	pCi/L	0.421	-0.0548
Radium-228	pCi/L	0.727	0.785
Field Oxidation Potential	mV	-142	-175.3
Field Specific Conductance	umhos/cm	1013	951
Field Temperature	deg C	13.3	13.1
Groundwater Elevation	feet	519.71	518.79
Oxygen, Dissolved	mg/L	0.27	0.19
Turbidity	NTU	0.01	3.82
pH at 25 Degrees C	Std. Units	7.4	8
Bicarbonate Alkalinity as CaCO3	mg/L	--	150
Carbonate Alkalinity as CaCO3	mg/L	--	<3.8
Iron, dissolved	ug/L	--	8600
Manganese, dissolved	ug/L	--	3800
Molybdenum, dissolved	ug/L	--	120
Total Alkalinity as CaCO3	mg/L	--	150
Iron, total	ug/L	--	8400
Magnesium, total	ug/L	--	28000
Manganese, total	ug/L	--	3600
Potassium, total	ug/L	--	3600
Sodium, total	ug/L	--	34000

Single Location

Name: IPL - Burlington

Location ID: MW-303																			
Number of Sampling Dates: 17																			
Parameter Name	Units	4/20/2016	6/6/2016	8/16/2016	10/3/2016	1/10/2017	4/3/2017	6/12/2017	8/15/2017	10/17/2017	5/9/2018	8/13/2018	10/10/2018	3/12/2019	4/3/2019	10/10/2019	6/3/2020	10/16/2020	
Boron	ug/L	25800	27500	26700	26100	25400	28800	26600	24100	25400	22900	24500	24500	--	22000	21000	23000	19000	
Calcium	mg/L	86.3	79.9	81.3	87.8	71.2	88.6	105	79.4	84.5	87	85.9	87.8	--	86	91	120	120	
Chloride	mg/L	17	16	16.3	16.1	14.4	15.2	17.3	15.3	15.3	15.1	15.7	16.3	--	15	16	18	17	
Fluoride	mg/L	0.43	0.16	0.28	0.28	0.18	0.2	0.22	0.24	0.25	0.22	0.44	0.27	--	0.43	<0.23	0.27	<0.23	
Field pH	Std. Units	7.39	7.48	7.57	7.56	7.64	7.57	7.24	6.97	8.59	7.51	8.03	7.1	6.46	7.79	7.13	7.12	7.19	
Sulfate	mg/L	34.6	23.3	14.8	6.6	34.1	24.1	3.9	46	42.1	128	78.7	31.8	--	120	84	100	190	
Total Dissolved Solids	mg/L	450	441	440	447	404	454	557	434	436	502	520	462	--	540	420	640	630	
Antimony	ug/L	0.55	0.12	<0.058	0.09	<0.058	0.029	<0.026	0.13	--	<0.026	<0.15	<0.078	--	<0.53	<0.53	<0.58	0.57	
Arsenic	ug/L	38.6	26.5	44.5	33	12.8	21.7	48.1	30.9	--	7.9	52	29.8	--	6.4	17	18	14	
Barium	ug/L	361	250	230	237	267	334	386	281	--	412	354	415	--	440	440	610	480	
Beryllium	ug/L	0.9	<0.08	<0.08	<0.08	<0.08	0.019	0.018	0.02	--	<0.012	<0.12	<0.089	--	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	0.58	<0.029	<0.029	<0.029	<0.029	<0.018	<0.018	0.018	--	0.028	<0.07	<0.033	--	<0.077	<0.039	<0.039	<0.049	
Chromium	ug/L	23.4	0.48	0.4	<0.34	0.78	0.2	0.43	0.38	--	0.27	0.29	0.69	--	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	7.8	0.56	0.55	0.64	<0.5	0.38	0.68	0.42	--	0.31	0.46	0.62	--	0.36	0.45	0.56	0.49	
Lead	ug/L	21	<0.19	<0.19	<0.19	0.21	0.047	<0.033	0.14	--	0.21	0.22	0.54	--	0.49	<0.27	0.29	0.18	
Lithium	ug/L	35.8	34.6	24	30.3	48.8	46.6	26.2	45.1	--	50.7	42.1	35.8	51.6	52	46	48	59	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	--	<0.1	--	<0.1	<0.1	
Molybdenum	ug/L	67.4	55.4	39.4	34.2	52.8	51.7	33.8	73.1	--	75.4	77.9	56.5	--	110	76	66	84	
Selenium	ug/L	2.2	<0.18	0.3	0.22	0.26	0.28	0.3	0.23	--	0.19	0.24	0.33	--	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.063	<0.036	0.13	--	<0.036	--	<0.099	--	<0.27	--	<0.26	--	
Total Radium	pCi/L	2.18	0.522	1.59	0.464	1.98	1.53	1.86	2.19	--	1.64	1.79	1.91	--	1.26	1.04	0.892/0.892	1.26	
Radium-226	pCi/L	0.866	0	0.269	0.393	0.677	0.542	0.734	1.37	--	0.677	0.462	0.997	--	0.552	0.728	0.804/0.804	0.317	
Radium-228	pCi/L	1.31	0.522	1.32	0.0706	1.3	0.99	1.13	0.821	--	0.965	1.33	0.913	--	0.703	0.316	<0.511/0.0877	0.944	
Field Oxidation Potential	mV	-101.6	-113	-184.4	-164.5	-150.6	-163.9	-102.9	-132	21.3	-165.5	-153	-132	-68.1	-122.8	-161	58.1	-185.6	
Field Specific Conductance	umhos/cm	513	1009	1271	1175	1024	1100	599.8	887	612.6	535.7	748	774	549	711	767	934	902	
Field Temperature	deg C	13.8	13.9	14.2	14.8	14.3	14.1	14.2	14.4	14.5	13.8	16.8	15.6	13.62	12.63	14.91	14.8	13.7	
Groundwater Elevation	feet	521.76	521.26	521.31	527.57	525.56	522.81	522.8	519.3	522.23	525.8	519.78	528.78	522.74	528.22	--	523.97	518.78	
Oxygen, Dissolved	mg/L	0.08	1.02	1.31	0.48	0.1	0.1	0.2	0.07	0.13	0.11	0.24	1	2.38	0.67	0.26	0.18	0.12	
Turbidity	NTU	487.4	2.45	0.24	3.76	3.85	4.42	2.57	0.46	2.79	0.97	14.26	17.3	19.4	18.2	5.36	16.03	2.03	
pH at 25 Degrees C	Std. Units	7.2	7.4	7.2	7.3	7.6	7.6	6.9	7.2	7.3	7.4	7.3	7.1	--	7.4	7.4	7.2	8	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	290	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8700	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3900	
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	85	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	290	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8500	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21000	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3700	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22000	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30000	
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	59	

Single Location

Name: IPL - Burlington

Location ID: MW-304																		
Number of Sampling Dates: 17																		
Parameter Name	Units	4/20/2016	6/6/2016	8/16/2016	10/3/2016	1/9/2017	4/3/2017	6/12/2017	8/15/2017	10/17/2017	5/9/2018	8/13/2018	10/10/2018	3/12/2019	4/3/2019	10/10/2019	6/3/2020	10/15/2020
Boron	ug/L	5020	5050	5050	4910	5350	5340	5160	5370	5580	5140	5440	6180	--	6300	5100	6400	7400
Calcium	mg/L	142	137	144	155	136	118	90.1	97.2	103	107	102	88.5	--	72	140	150	150
Chloride	mg/L	34.7	30	28.2	30.7	47.7	39.2	35.2	30.2	46.5	58.1	25.9	50.3	--	39	25	21	21
Fluoride	mg/L	0.092	<0.073	<0.027	0.072	<0.027	<0.1	<0.1	<0.1	0.12	0.11	0.13	<0.19	--	0.35	<0.23	<0.23	<0.23
Field pH	Std. Units	9.2	8.65	9.42	9.25	9.44	8.58	7.93	8.71	9.52	8.51	7.6	9.01	6.94	8.56	7.17	7.23	8.46
Sulfate	mg/L	397	324	383	431	330	263	211	216	248	273	188	271	--	140	220	250	420
Total Dissolved Solids	mg/L	706	678	718	721	651	593	519	501	540	657	551	537	--	460	710	750	820
Antimony	ug/L	0.77	0.77	0.76	0.51	0.8	0.63	0.51	0.88	--	0.75	0.3	0.77	--	0.66	<0.53	<0.58	0.52
Arsenic	ug/L	60	59.4	64.3	58.9	68.7	60	58.4	65.6	--	57.2	45.4	58.3	--	59	36	35	49
Barium	ug/L	112	127	115	130	117	131	126	84.7	--	115	140	92	--	90	210	220	170
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.036	<0.012	<0.012	--	<0.012	<0.12	<0.089	--	<0.27	<0.27	<0.27	<0.27
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.018	<0.018	<0.018	--	<0.018	<0.07	0.054	--	<0.077	<0.039	<0.039	<0.049
Chromium	ug/L	<0.34	<0.34	0.58	0.42	<0.34	0.16	0.087	0.3	--	0.22	0.34	0.091	--	<0.98	<0.98	<1.1	<4.4
Cobalt	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.13	0.11	0.1	--	0.098	<0.15	0.19	--	0.11	0.13	0.15	<0.36
Lead	ug/L	<0.19	<0.19	<0.19	<0.19	<0.19	<0.033	<0.033	0.9	--	<0.033	<0.12	<0.13	--	<0.27	<0.27	<0.27	<0.11
Lithium	ug/L	52.4	57.8	48.5	61	70.7	52.1	44.1	51	--	63.8	34.3	82.4	35.9	52	38	47	92
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	--	<0.1	--	0.11	<0.1
Molybdenum	ug/L	101	105	118	131	121	90.6	67.4	66.8	--	126	74.9	113	47.4	58	47	45	140
Selenium	ug/L	<0.18	<0.18	0.23	0.24	0.24	0.31	0.19	0.26	--	0.24	0.21	0.26	--	<1	<1	<1	<4
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.068	<0.036	0.12	--	<0.036	--	<0.099	--	<0.27	--	<0.26	--
Total Radium	pCi/L	1.26	0.659	1.1	1.16	0.455	0.742	1.29	0.752	--	0.589	0.725	0.706	--	0.408	0.781	0.573/0.573	0.304
Radium-226	pCi/L	0	0.0649	0.22	0.458	0.067	0.48	0.928	0.404	--	0.405	0.151	0.233	--	0.116	0.353	0.3/0.3	0.0765
Radium-228	pCi/L	1.26	0.594	0.881	0.704	0.388	0.262	0.362	0.348	--	0.184	0.574	0.473	--	0.292	0.428	<0.375/0.272	0.227
Field Oxidation Potential	mV	-309.5	-153	-301	-251.4	-274.8	-260.1	-160.6	-231.3	5.9	-273	-202	-100.2	-73.8	-216.7	-157.5	52.4	-282.6
Field Specific Conductance	umhos/cm	766	1455	1840	1712	1634	1427	512.5	971	756	906	836	780	460	658	934	1087	1062
Field Temperature	deg C	13.9	14	14.4	15.3	15	14.1	14.3	14.8	15.1	13.5	18.1	17.41	13.87	12.96	15.64	14.6	14.7
Groundwater Elevation	feet	521.78	521.28	521.37	527.57	525.62	522.87	522.9	519.23	522.32	525.85	519.81	528.82	522.8	528.27	--	524.02	518.69
Oxygen, Dissolved	mg/L	0.04	1.55	4.79	0.43	0.11	0.11	0.17	0.03	0.1	1.4	0.09	0.23	2.11	0.39	0.28	0.15	0.08
Turbidity	NTU	1.43	1.26	0.01	0.3	0	0.61	0.23	0.26	1.89	2.84	4.26	1.36	9.28	6.22	1.18	18.18	0.02
pH at 25 Degrees C	Std. Units	8.8	8.9	8.8	8.8	8.2	7.9	7.9	8.8	8.9	8.3	7.5	8.6	--	8	7.5	7.4	8.4
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	130
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	720
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	440
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	140
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	130
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	660
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3800
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	380
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14000
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	51000
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	93

Single Location

Name: IPL - Burlington

Location ID: MW-305																		
Number of Sampling Dates: 16																		
Parameter Name	Units	4/20/2016	6/6/2016	8/17/2016	10/3/2016	1/10/2017	4/3/2017	6/13/2017	8/16/2017	10/16/2017	5/9/2018	8/13/2018	10/10/2018	4/3/2019	10/11/2019	6/3/2020	10/15/2020	
Boron	ug/L	1990	2040	1750	1730	1910	1880	2180	1950	2480	2000	2400	2040	2000	2100	2200	2400	
Calcium	mg/L	116	119	95.1	93.1	88.8	82.8	96.3	80.2	92.2	82.5	103	93.2	83	90	120	120	
Chloride	mg/L	34.8	32.9	34.5	32.3	34.8	34.2	37	34.3	35.8	34.8	34.8	34.9	33	33	36	32	
Fluoride	mg/L	0.45	0.28	0.3	0.43	0.34	0.42	0.43	0.48	0.43	0.48	0.45	0.44	0.75	0.37	0.45	<0.23	
Field pH	Std. Units	7.25	7.75	7.54	7.63	7.48	7.55	7.74	7	7.78	7.72	7.81	7.29	7.8	7.36	7.12	7.23	
Sulfate	mg/L	35.7	68	26.9	38.1	19.2	10.2	35	13.4	24.6	11.7	24.8	19.6	10	8.8	33	54	
Total Dissolved Solids	mg/L	574	590	502	467	455	410	532	435	437	441	542	490	470	490	640	600	
Antimony	ug/L	0.11	0.11	<0.058	0.082	<0.058	<0.026	<0.026	0.13	--	<0.026	<0.15	<0.078	<0.53	<0.53	<0.58	<0.51	
Arsenic	ug/L	0.91	0.4	0.33	0.61	0.23	0.32	0.22	0.32	--	0.28	0.39	0.44	<0.75	<0.75	<0.88	<0.88	
Barium	ug/L	231	242	208	190	208	178	231	186	--	173	219	197	160	180	230	250	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.038	0.013	0.018	--	<0.012	<0.12	<0.089	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.018	<0.018	<0.018	--	<0.018	<0.07	<0.033	<0.077	<0.039	<0.039	<0.049	
Chromium	ug/L	0.43	0.36	0.57	0.76	0.54	0.29	0.27	0.43	--	0.25	0.21	0.27	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.14	0.2	0.15	--	0.14	<0.15	0.17	0.16	0.13	0.18	0.15	
Lead	ug/L	0.22	<0.19	<0.19	<0.19	<0.19	0.19	0.11	0.24	--	0.034	<0.12	0.2	<0.27	<0.27	<0.27	<0.11	
Lithium	ug/L	24	29.8	17.2	25.2	28.5	25	26	26.6	--	27.8	33.6	27.6	29	26	28	34	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	<0.1	--	0.12	<0.1	
Molybdenum	ug/L	0.6	0.79	1.2	1.2	0.76	0.89	1.1	1.3	--	0.87	1	0.72	<1.1	<1.1	<1.1	1.1	
Selenium	ug/L	<0.18	<0.18	0.19	<0.18	<0.18	0.19	<0.086	0.18	--	0.24	0.16	0.16	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.036	<0.036	0.15	--	<0.036	--	<0.099	<0.27	--	<0.26	--	
Total Radium	pCi/L	1.73	1.58	1.55	1.54	1.31	0.73	1.35	1.14	--	2.11	1.78	1.22	0.519	0.441	0.759/0.759	0.55	
Radium-226	pCi/L	0.125	0.529	0.143	0.43	0.467	0.128	0.551	0.454	--	0.992	0.411	0.423	0.154	0.256	0.248/0.248	0.282	
Radium-228	pCi/L	1.6	1.05	1.41	1.11	0.847	0.602	0.795	0.683	--	1.12	1.37	0.8	0.365	0.185	0.511/0.511	0.269	
Field Oxidation Potential	mV	-142	-120	-133.3	-133.6	-119.8	-145.1	-80.8	-94.7	44.9	-146.8	-134	-140	-133.5	-132.9	39.8	-175	
Field Specific Conductance	umhos/cm	807	1919	1611	1328	1371	1195	624	972	759	733	901	846	733	795	972	987	
Field Temperature	deg C	14.9	14.9	15	15.1	14.7	14.9	15.5	15.4	15.1	15.2	16.3	16.2	14.47	14.29	15.9	14.6	
Groundwater Elevation	feet	521.96	521.48	521.46	527.71	525.74	523.03	522.78	519.93	522.48	526.06	520.29	528.97	528.36	--	524.12	519	
Oxygen, Dissolved	mg/L	0.13	1.18	0.92	0.44	0.16	0.13	0.09	0.11	0.14	1.4	0.35	0.2	0.59	0.2	0.14	0.37	
Turbidity	NTU	10.6	1.79	0.41	1.15	0.46	1.88	0.89	0.25	0.71	0.64	3.85	4.94	3.88	3.02	13.46	0.02	
pH at 25 Degrees C	Std. Units	7.1	7.2	7	7.4	7.8	7.5	7.1	7.3	7.2	7.5	7.5	7.3	7.4	7.5	7.3	8.1	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	470	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3000	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2900	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	470	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3000	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	26000	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2800	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5700	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54000	

Single Location

Name: IPL - Burlington

Location ID: MW-306																			
Number of Sampling Dates: 17																			
Parameter Name	Units	4/21/2016	6/6/2016	8/17/2016	10/3/2016	1/10/2017	4/4/2017	6/13/2017	8/16/2017	10/16/2017	5/9/2018	8/14/2018	10/10/2018	3/11/2019	4/3/2019	10/11/2019	6/4/2020	10/15/2020	
Boron	ug/L	3460	3340	3300	3340	3630	3770	3350	3700	3680	3480	3430	3350	--	2900	3100	3200	3200	
Calcium	mg/L	37.5	38.1	41.2	40.8	37.5	40.3	34.5	38.9	35.3	32	33.5	34.6	--	37	38	41	37	
Chloride	mg/L	22.9	22.6	20.6	21.1	20.6	20.2	20.6	20.6	20.6	20.3	20.6	20.9	--	21	20	21	18	
Fluoride	mg/L	0.093	<0.073	0.03	0.075	0.052	<0.1	<0.1	<0.1	0.15	0.12	0.1	<0.19	--	0.36	<0.23	<0.23	<0.23	
Field pH	Std. Units	10.4	10.36	6.37	6.5	6.33	6.29	11.25	6.59	10.66	6.8	10.33	6.04	6.27	6.69	10.53	10.48	10	
Sulfate	mg/L	152	132	135	137	123	120	126	93.4	97.5	107	111	121	--	110	110	120	71	
Total Dissolved Solids	mg/L	333	321	348	333	307	302	305	312	301	396	303	289	--	320	290	320	300	
Antimony	ug/L	1.2	1.2	1	1.2	1.3	1.2	1.4	0.92	--	1.2	1.4	1.2	--	1.1	1.2	1.1	0.9	
Arsenic	ug/L	56.6	47.4	43.9	46.4	53.4	50.5	48.1	43.2	--	52.6	48	50.6	--	50	46	50	46	
Barium	ug/L	21.2	18.2	18.8	15.5	14.4	14.8	14.1	14.3	--	13.6	15.5	14.8	--	14	14	16	16	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.024	0.054	<0.012	--	<0.012	0.14	<0.089	--	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.018	0.036	<0.018	--	0.029	0.18	<0.033	--	<0.077	<0.039	<0.039	<0.049	
Chromium	ug/L	<0.34	<0.34	0.4	<0.34	0.45	0.49	0.31	0.43	--	0.24	0.25	0.18	--	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.034	0.046	0.054	--	0.035	0.18	<0.062	--	<0.091	<0.091	<0.091	<0.091	
Lead	ug/L	0.28	<0.19	<0.19	<0.19	0.19	0.16	0.25	0.3	--	0.26	0.69	0.37	--	<0.27	0.44	0.33	0.43	
Lithium	ug/L	33.5	37.9	39.5	35.9	44.1	41.2	41.4	46.8	--	36.6	46.8	41.4	39.2	45	46	43	42	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	--	<0.1	--	0.1	<0.1	
Molybdenum	ug/L	95.7	84.1	80.9	83.7	88.9	87.4	80.4	94.4	--	84.7	82.9	83.5	--	78	84	86	82	
Selenium	ug/L	0.66	0.54	0.81	0.46	0.55	0.48	0.74	0.52	--	0.66	0.97	0.6	--	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.036	<0.036	0.15	--	<0.036	--	<0.099	--	<0.27	--	<0.26	--	
Total Radium	pCi/L	1.28	0.858	0.208	0.0727	0.744	1.19	0.254	1.03	--	0.482	1.04	1.1	--	0.165	0.526	<0.313/0.0769	0.119	
Radium-226	pCi/L	0.438	0.144	0	-0.143	0.0633	0.457	0.157	0.424	--	0.174	0.397	0.383	--	0.0333	0.21	<0.0638/0.0516	0.0226	
Radium-228	pCi/L	0.841	0.714	0.208	0.0727	0.681	0.731	0.0974	0.604	--	0.308	0.64	0.712	--	0.132	0.316	<0.313/0.0253	0.0962	
Field Oxidation Potential	mV	-127.8	-181	-155.5	-96.8	-26.7	-64.7	-151	-52.5	286.2	-104.3	-265	58.1	-88.9	-92.8	-165.1	59	-273.7	
Field Specific Conductance	umhos/cm	398	977	1000	874	864	823	331.7	662	447.9	354.2	447	478	343	4711	473	482	453.7	
Field Temperature	deg C	14.5	14.4	14.8	14.8	14.4	14.5	15.8	14.9	14.8	14.7	15.9	17.25	14.27	13.44	14.28	14.4	14.1	
Groundwater Elevation	feet	521.74	521.43	521.53	527.67	525.67	523.07	522.87	519.82	522.72	526	520.14	528.95	523.21	528.4	--	524.45	519.05	
Oxygen, Dissolved	mg/L	0.11	0.57	1.91	0.14	0.06	0.12	0.22	0.03	0.37	0.05	0.3	0.38	0.8	0.69	0.21	0.16	0.11	
Turbidity	NTU	0.4	0.1	0.4	0.97	0.19	0.14	0.81	0.1	0.35	0.71	2.88	2.67	0.56	0.81	1.84	15.96	0.02	
pH at 25 Degrees C	Std. Units	9.9	10.2	6.1	6.8	7.1	6.8	10.2	6.8	9.7	6.5	10	6	--	6	10.5	10.3	9.6	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	52	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	82	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<4	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	130	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<100	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.4	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20000	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	46000	
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	42	

Single Location

Name: IPL - Burlington

Location ID: MW-307																			
Number of Sampling Dates: 17																			
Parameter Name	Units	4/20/2016	6/6/2016	8/17/2016	10/3/2016	1/10/2017	4/4/2017	6/13/2017	8/16/2017	10/16/2017	5/9/2018	8/14/2018	10/10/2018	3/11/2019	4/3/2019	10/11/2019	6/4/2020	10/15/2020	
Boron	ug/L	3720	3760	3720	3880	3960	4050	3740	3780	3920	3910	4090	3720	--	3400	3700	3600	3400	
Calcium	mg/L	31.9	30.8	31.3	34.1	31.3	32.3	28.1	29.8	31.3	27.3	27.2	27.6	--	29	31	37	36	
Chloride	mg/L	23.5	22.6	21.4	21.6	21.3	20.9	21.3	20.7	20.8	20.1	20.1	21.6	--	21	19	21	17	
Fluoride	mg/L	0.099	<0.073	0.032	0.079	0.057	<0.1	<0.1	<0.1	0.13	0.11	0.094	<0.19	--	0.51	<0.23	<0.23	<0.23	
Field pH	Std. Units	10.28	10.19	10.6	10.5	10.82	10.94	10.74	10.8	10.46	10.3	10.12	9.88	9.71	10.39	10.14	10.03	10.05	
Sulfate	mg/L	183	150	160	161	145	135	136	130	126	119	119	143	--	120	130	180	160	
Total Dissolved Solids	mg/L	408	385	386	374	355	354	353	356	341	347	340	336	--	420	340	390	370	
Antimony	ug/L	0.46	0.62	0.48	0.64	0.53	0.48	0.48	0.54	--	0.5	0.58	0.62	--	<0.53	<0.53	<0.58	0.56	
Arsenic	ug/L	53	57.4	57.1	59.2	59.2	56.2	55.8	52.8	--	54.3	52.3	52.8	--	43	47	47	47	
Barium	ug/L	38.3	42.2	38.7	38.4	34.7	33.4	33	31.1	--	32.3	29	31.1	--	29	31	36	39	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.033	<0.012	<0.012	--	<0.012	<0.12	<0.089	--	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.018	<0.018	0.023	--	0.12	<0.07	0.068	--	<0.077	<0.039	0.044	<0.049	
Chromium	ug/L	<0.34	0.84	0.5	0.62	<0.34	0.19	0.24	0.33	--	0.27	0.36	0.15	--	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.037	0.042	0.034	--	0.033	<0.15	<0.062	--	<0.091	<0.091	<0.091	<0.091	
Lead	ug/L	0.48	1.1	0.36	0.36	0.45	0.43	0.43	0.46	--	0.39	0.43	0.49	--	0.37	0.41	<0.27	0.19	
Lithium	ug/L	43.1	45.6	42.4	45.1	49.6	48.4	42.2	47.5	--	47.8	56.1	45.4	50.7	50	48	48	51	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	0.047	<0.046	<0.046	--	<0.09	--	<0.09	--	<0.1	--	0.12	<0.1	
Molybdenum	ug/L	146	155	142	150	154	154	155	152	--	154	155	159	156	100	130	130	140	
Selenium	ug/L	0.47	0.45	0.46	0.45	0.44	0.42	0.46	0.42	--	0.36	0.41	0.36	--	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.036	<0.036	0.18	--	<0.036	--	<0.099	--	<0.27	--	<0.26	--	
Total Radium	pCi/L	1.6	0.194	0.882	0.552	0	0.651	0.85	0.673	--	0.0587	0.415	1.43	--	0.447	0.232	<0.471/0.277	0.18	
Radium-226	pCi/L	0.153	-0.064	0.068	0.197	-0.075	-0.156	0.735	0.393	--	0.0587	0	0.988	--	0.0752	0.218	<0.101/0.0806	0.18	
Radium-228	pCi/L	1.45	0.258	0.814	0.355	-0.0697	0.651	0.115	0.28	--	-0.024	0.415	0.439	--	0.372	0.0141	<0.471/0.197	-2.16	
Field Oxidation Potential	mV	-201.7	-168	-212.1	-289.4	-253.6	-287.1	-177.1	-168.9	-78.9	-168.6	-221	-87.3	-78.3	-167.8	-126.3	60.2	-269.7	
Field Specific Conductance	umhos/cm	480.2	1142	1064	958	940	901	368.3	735	485.7	499.9	512	497	367	500	536	586	564.8	
Field Temperature	deg C	14.2	14.1	14.2	14.6	14.4	14.4	14.9	14.6	14.7	14.4	15.6	15.64	14.36	13.56	14.37	14.8	14	
Groundwater Elevation	feet	522.38	521.75	521.91	527.81	525.81	523.14	523.17	520.16	522.55	526.06	520.46	529.08	523.49	528.63	--	524.62	519.33	
Oxygen, Dissolved	mg/L	0.08	0.6	6.01	0.29	0.11	0.28	0.12	0.19	0.18	1.1	0.49	0.22	1.07	0.68	0.24	0.3	0.11	
Turbidity	NTU	1.54	0.46	0.6	1.4	0.6	0.14	3.11	1.98	0.32	1.87	5.09	1.85	1.05	3.1	3.23	14.33	0.02	
pH at 25 Degrees C	Std. Units	9.8	10	9.8	10.1	9.6	9.8	9.8	9.8	9.8	9.9	9.9	9.9	--	10	10.2	10	9.5	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1.9	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	79	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.6	
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	140	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	84	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<100	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.4	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	36000	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54000	
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	50	

Single Location

Name: IPL - Burlington

Location ID: MW-307A			
Number of Sampling Dates: 2			
Parameter Name	Units	9/9/2020	10/14/2020
Boron	ug/L	3900	4100
Calcium	mg/L	10	11
Chloride	mg/L	34	31
Fluoride	mg/L	<0.23	<0.23
Field pH	Std. Units	7.83	7.8
Sulfate	mg/L	110	110
Total Dissolved Solids	mg/L	370	360
Antimony	ug/L	<0.51	<0.51
Arsenic	ug/L	<0.88	<0.88
Barium	ug/L	45	47
Beryllium	ug/L	<0.27	<0.27
Cadmium	ug/L	0.058	0.052
Chromium	ug/L	<1.1	<1.1
Cobalt	ug/L	0.11	0.15
Lead	ug/L	0.69	0.63
Lithium	ug/L	6.8	8.3
Mercury	ug/L	<0.1	<0.1
Molybdenum	ug/L	110	120
Selenium	ug/L	<1	<1
Thallium	ug/L	<0.26	--
Total Radium	pCi/L	0.605	0.412
Radium-226	pCi/L	0.168	0.169
Radium-228	pCi/L	0.438	0.243
Field Oxidation Potential	mV	-154.2	-189.9
Field Specific Conductance	umhos/cm	585	553.6
Field Temperature	deg C	14.4	14.6
Groundwater Elevation	feet	519.97	519
Oxygen, Dissolved	mg/L	0.17	0.18
Turbidity	NTU	0	2.96
pH at 25 Degrees C	Std. Units	8	7.9
Bicarbonate Alkalinity as CaCO3	mg/L	--	110
Carbonate Alkalinity as CaCO3	mg/L	--	<1.9
Iron, dissolved	ug/L	--	460
Manganese, dissolved	ug/L	--	420
Molybdenum, dissolved	ug/L	--	120
Total Alkalinity as CaCO3	mg/L	--	110
Iron, total	ug/L	--	610
Magnesium, total	ug/L	--	1700
Manganese, total	ug/L	--	430
Potassium, total	ug/L	--	3100
Sodium, total	ug/L	--	110000

Single Location

Name: IPL - Burlington

Location ID: MW-308																			
Number of Sampling Dates: 17																			
Parameter Name	Units	4/21/2016	6/6/2016	8/17/2016	10/3/2016	1/10/2017	4/4/2017	6/13/2017	8/16/2017	10/17/2017	5/8/2018	8/13/2018	10/10/2018	3/12/2019	4/3/2019	10/10/2019	6/4/2020	10/14/2020	
Boron	ug/L	4960	4980	4870	4760	4980	5160	4680	4910	4850	5030	5070	4710	--	4300	4500	4700	4500	
Calcium	mg/L	39.8	36.8	35.1	33.5	33.2	34.2	30.1	32.3	32.6	28.7	28.7	28.5	--	32	30	34	37	
Chloride	mg/L	72.3	65.7	53.1	47.8	43.5	42.6	40.6	39.8	38.2	36.2	36.7	35.9	--	38	40	58	45	
Fluoride	mg/L	0.16	0.095	0.078	0.13	0.084	0.11	0.12	0.14	0.17	0.17	0.16	<0.19	--	0.37	<0.23	0.37	<0.23	
Field pH	Std. Units	9.77	9.76	9.95	10.17	10.21	10.34	9.99	10.15	9.75	9.75	9.86	9.82	7.72	9.97	9.42	9.65	9.7	
Sulfate	mg/L	222	187	180	194	192	175	188	181	177	164	167	193	--	170	160	190	160	
Total Dissolved Solids	mg/L	577	548	541	495	474	494	501	483	472	494	468	440	--	490	400	470	460	
Antimony	ug/L	0.29	0.34	0.22	0.38	0.33	0.28	0.32	0.3	--	0.32	0.32	0.36	--	<0.53	<0.53	<0.58	<0.51	
Arsenic	ug/L	83.8	80.5	84.2	82.6	86.4	83.1	80.3	77.9	--	79.1	82.5	79.5	--	78	72	76	69	
Barium	ug/L	130	110	110	89.8	90.6	85.1	81.5	76.2	--	64.3	67.1	66.5	--	70	70	66	74	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.017	<0.012	<0.012	--	<0.012	<0.12	<0.089	--	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	<0.029	<0.029	<0.029	0.097	0.034	<0.018	0.035	<0.018	--	0.02	<0.07	0.058	--	<0.077	<0.039	0.044	<0.049	
Chromium	ug/L	0.46	0.41	0.52	<0.34	0.37	0.22	0.16	0.38	--	0.25	<0.19	0.16	--	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.06	0.068	0.069	--	0.057	<0.15	0.074	--	<0.091	<0.091	<0.091	<0.091	
Lead	ug/L	0.33	<0.19	<0.19	0.28	0.27	0.21	0.34	0.33	--	0.25	0.27	0.45	--	<0.27	<0.27	0.4	0.15	
Lithium	ug/L	45.6	45.8	41.5	41.2	47	46.9	42.4	44.1	--	46	52	43.6	48.9	50	52	48	51	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	0.047	<0.046	<0.046	--	<0.09	--	<0.09	--	<0.1	--	0.13	<0.1	
Molybdenum	ug/L	153	139	133	138	140	140	136	137	--	140	140	145	135	110	120	120	110	
Selenium	ug/L	0.69	0.47	0.58	0.45	0.68	0.4	0.3	0.47	--	0.31	0.43	0.4	--	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.036	<0.036	<0.036	--	<0.036	--	<0.099	--	<0.27	--	<0.26	--	
Total Radium	pCi/L	0.712	1.22	0.376	0.549	0	0.854	0.881	0.229	--	0.283	0.0726	0.334	--	0.328	0.288	<0.42/0.268	0.106	
Radium-226	pCi/L	0.0744	0	0.0777	0.312	0	0.213	0.4	0.063	--	0.182	0.0726	0.275	--	0.0363	0.202	<0.118/0.109	-0.0615	
Radium-228	pCi/L	0.638	1.22	0.298	0.237	-0.059	0.641	0.481	0.166	--	0.101	-0.068	0.0585	--	0.291	0.0862	<0.42/0.159	0.106	
Field Oxidation Potential	mV	-77.2	-149	-213.7	-239.6	-163.8	-300.6	-162.3	-139.8	-109.4	-158.2	-238	-201	-60.7	-142.3	-82.6	28	-264.6	
Field Specific Conductance	umhos/cm	712	1678	1533	1306	1303	1258	514.6	1039	689	698	710	709	500	681	671	713	682	
Field Temperature	deg C	14.2	14.2	14.3	14.6	13.7	14.1	14.9	14.5	14.6	14.4	15.4	15.3	14.06	14.04	14.64	15.4	14.7	
Groundwater Elevation	feet	521.93	521.43	521.56	527.62	525.65	523.07	522.9	519.8	522.46	525.62	520.22	528.98	523.13	528.39	--	524.1	519.02	
Oxygen, Dissolved	mg/L	0.09	0.81	0.16	0.55	0.11	0.16	0.2	0.21	0.09	1.5	0.11	0.2	2.57	1.16	0.21	0.23	0.1	
Turbidity	NTU	1.83	0.42	0.34	0.73	1.27	0.43	1.56	0.61	0.6	1.26	4.63	1.35	1.68	1.66	2.93	13.38	0.15	
pH at 25 Degrees C	Std. Units	9.4	9.6	9.3	9.7	9.4	9.2	9.5	9.4	9.4	9.4	9.4	9.5	--	9.6	9.9	9.6	9.6	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	54	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	89	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	290	
Molybdenum, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	110	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	140	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<50	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1700	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	280	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	35000	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	84000	
Lithium, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	53	

Single Location

Name: IPL - Burlington

Location ID: MW-309																		
Number of Sampling Dates: 16																		
Parameter Name	Units	4/21/2016	6/7/2016	8/16/2016	10/3/2016	1/10/2017	4/4/2017	6/13/2017	8/16/2017	10/17/2017	5/8/2018	8/14/2018	10/10/2018	4/4/2019	10/11/2019	6/3/2020	10/14/2020	
Boron	ug/L	5270	5590	5180	5140	4880	3800	4070	4310	4400	4720	4930	4720	4200	4300	4400	4400	
Calcium	mg/L	118	100	99.2	126	141	156	118	130	101	83.6	74.1	72.4	73	68	82	59	
Chloride	mg/L	145	152	126	117	104	82.7	89.5	92.5	85.4	112	111	105	100	74	84	64	
Fluoride	mg/L	0.57	0.36	0.35	0.39	0.39	0.41	0.5	0.4	0.47	0.4	0.43	0.4	0.71	0.29	0.58	<0.23	
Field pH	Std. Units	7.33	7.43	7.66	7.66	7.37	7.31	7.1	7.62	8.5	7.25	7.39	7.46	7.45	7.19	7.09	7.61	
Sulfate	mg/L	49	51.2	100	104	127	198	171	136	149	107	98.9	111	78	160	180	160	
Total Dissolved Solids	mg/L	768	728	726	772	839	955	841	859	671	688	668	650	650	610	730	550	
Antimony	ug/L	0.087	0.12	<0.058	0.09	<0.058	0.039	0.03	0.051	--	<0.026	<0.15	<0.078	<0.53	<0.53	<0.58	<0.51	
Arsenic	ug/L	31.5	27.3	29.3	31.5	34.5	30	36.2	34.6	--	28.2	33.3	35.6	30	34	34	33	
Barium	ug/L	384	337	316	364	362	264	256	274	--	154	180	194	130	180	260	220	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.037	0.012	<0.012	--	0.012	<0.12	<0.089	<0.27	<0.54	<0.27	<0.27	
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.018	0.021	<0.018	--	0.021	<0.07	<0.033	<0.077	<0.039	<0.039	<0.049	
Chromium	ug/L	0.38	0.35	0.53	<0.34	0.4	0.23	0.18	0.49	--	0.32	0.22	0.18	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	2.1	1.2	0.98	1.1	1.7	6.5	2.9	1.3	--	4.9	0.82	0.68	1.3	0.52	0.57	0.33	
Lead	ug/L	<0.19	<0.19	<0.19	<0.19	<0.19	<0.033	0.12	0.26	--	0.045	<0.12	<0.13	<0.27	<0.27	<0.27	<0.11	
Lithium	ug/L	<4.9	<4.9	<4.9	<4.9	<4.9	5	<2.9	6.3	--	<4.6	<4.6	<4.6	3.3	<5.4	2.4	<2.5	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	<0.1	--	<0.1	<0.1	
Molybdenum	ug/L	30.7	31.1	43.5	49.1	44.8	41.5	60.8	67.5	--	43.4	52.8	71.8	47	90	87	100	
Selenium	ug/L	0.39	0.25	0.24	0.31	0.25	0.44	0.35	0.34	--	0.3	0.31	0.29	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.036	<0.036	<0.036	--	<0.036	--	<0.099	<0.27	--	<0.26	--	
Total Radium	pCi/L	2.55	2.28	1.74	1.38	0.455	1.76	0.846	1.09	--	0.218	0.96	1.05	0.42	0.596	<0.398/0.296	0.372	
Radium-226	pCi/L	0.991	0.561	0.67	0.694	0.65	0.573	0.292	0.615	--	-0.061	0.28	0.127	0.126	0.274	0.182/0.182	0.142	
Radium-228	pCi/L	1.56	1.72	1.07	0.69	0.39	1.19	0.554	0.47	--	0.218	0.68	0.919	0.295	0.322	<0.398/0.114	0.23	
Field Oxidation Potential	mV	-138.9	-121	-150.9	-176.2	-131.4	-138	-60.7	-112.8	-31	-139.2	-143	-53.5	-99.4	-165.6	37	-208.4	
Field Specific Conductance	umhos/cm	1034	2369	228.5	2265	2502	2528	936	1853	1058	813	1093	1038	997	1040	1086	851	
Field Temperature	deg C	13.4	13.4	13.8	14.6	14.3	13.9	14.2	14.6	14.6	13.5	14.2	15.67	12.6	13.73	14.8	14.3	
Groundwater Elevation	feet	522.09	521.39	521.7	527.57	525.57	523.1	522.91	519.93	522.67	525.54	520.22	528.93	528.4	--	524.06	519.28	
Oxygen, Dissolved	mg/L	0.1	0.78	2.36	0.54	0.11	0.2	0.15	0.2	0.08	0.05	0.14	0.18	0.51	0.21	0.23	0.14	
Turbidity	NTU	3.93	0.59	0.58	0.72	5.84	15.11	4.62	4.61	3.08	6.49	12.67	34.45	20.1	8.93	18.88	18.9	
pH at 25 Degrees C	Std. Units	7	7	7	7.2	7.3	7.4	6.9	7.2	7	7.4	7.3	7.1	7.1	7.2	7.2	7.2	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	190	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11000	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3400	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	190	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12000	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18000	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3200	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1800	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	90000	

Single Location

Name: IPL - Burlington

Location ID: MW-310																		
Number of Sampling Dates: 16																		
Parameter Name	Units	4/21/2016	6/7/2016	8/16/2016	10/3/2016	1/9/2017	4/4/2017	6/12/2017	8/16/2017	10/16/2017	5/8/2018	8/14/2018	10/10/2018	4/4/2019	10/11/2019	6/2/2020	10/14/2020	
Boron	ug/L	437	422	326	400	413	503	2210	365	305	217	256	268	560	380	500	290	
Calcium	mg/L	166	181	140	167	145	180	116	139	105	104	102	107	120	120	130	92	
Chloride	mg/L	154	196	96.9	143	113	187	94.7	121	38.3	24.4	33.8	67.1	88	59	87	17	
Fluoride	mg/L	0.39	0.28	0.29	0.34	0.33	0.26	0.32	0.32	0.39	0.33	0.39	0.4	0.55	0.34	0.65	<0.23	
Field pH	Std. Units	7.37	7.21	7.7	7.71	7.38	7.5	7.3	7.5	7.92	7.46	7.44	7.2	7.84	6.95	7.3	7.34	
Sulfate	mg/L	53.1	47.7	54	62.6	48.5	34.3	101	41.3	35.1	28.8	27.2	37.9	21	51	100	19	
Total Dissolved Solids	mg/L	879	1040	703	743	653	853	625	760	445	462	472	512	600	410	590	390	
Antimony	ug/L	<0.058	0.12	<0.058	0.099	<0.058	0.032	0.048	0.1	--	<0.026	<0.15	<0.078	<0.53	<0.53	<0.58	1.9	
Arsenic	ug/L	60.6	60.2	64.1	74	72.6	79.8	64	68.2	--	57.8	56.2	62.1	65	61	55	63	
Barium	ug/L	813	829	589	734	605	825	586	665	--	403	398	450	560	500	550	400	
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.019	<0.012	<0.012	--	<0.012	<0.12	<0.089	<0.27	<0.27	<0.27	<0.27	
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.018	0.025	<0.018	--	<0.018	<0.07	<0.033	<0.077	<0.039	<0.039	<0.049	
Chromium	ug/L	<0.34	<0.34	0.85	0.5	0.45	0.19	0.2	0.52	--	0.16	<0.19	0.082	<0.98	<0.98	<1.1	<1.1	
Cobalt	ug/L	2.6	2.7	1.8	2	1.6	1.9	1.4	1.8	--	1.2	1.4	1.4	1.9	1.9	2.3	1.5	
Lead	ug/L	<0.19	<0.19	<0.19	<0.19	<0.19	<0.033	0.081	0.64	--	0.044	<0.12	<0.13	<0.27	<0.27	<0.27	<0.11	
Lithium	ug/L	<4.9	<4.9	<9.8	<4.9	<4.9	<2.9	<2.9	7.7	--	<4.6	5.3	<4.6	<2.7	<2.7	<2.3	<2.5	
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	<0.1	--	<0.1	<0.1	
Molybdenum	ug/L	5.1	3.9	4.4	4.8	4.4	3.4	10	4.1	--	4.2	4	4.6	5.2	6	5.8	3.6	
Selenium	ug/L	<0.18	<0.18	<0.18	<0.18	<0.18	0.24	0.18	0.2	--	0.14	<0.16	0.19	<1	<1	<1	<1	
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.036	<0.036	0.35	--	<0.036	--	<0.099	<0.27	--	<0.26	--	
Total Radium	pCi/L	2.41	1.28	1.99	1.34	0.941	3.17	1.7	2.21	--	0.755	1.55	2.56	1.19	0.49	0.844/0.844	0.552	
Radium-226	pCi/L	0.951	0.839	0.644	0.796	0.527	0.175	0.505	0.793	--	0	0.616	1.1	0.471	0.473	0.457/0.457	0.333	
Radium-228	pCi/L	1.46	0.437	1.35	0.54	0.414	2.99	1.19	1.42	--	0.755	0.938	1.46	0.724	0.0174	0.387/0.387	0.219	
Field Oxidation Potential	mV	-125.4	-122	-172.9	-184	-161.2	-175.4	-101.1	102.8	-63.6	-198.8	-194	-166	-175.8	-189.7	38.6	-223.6	
Field Specific Conductance	umhos/cm	1082	3170	2224	2295	2116	2528	742	1783	791	594.6	840	938	1034	961	881	711	
Field Temperature	deg C	11.7	12.2	15.1	16.6	14.3	12	13.5	15.4	16.6	11.1	15	17	10.8	15.88	12.8	16.4	
Groundwater Elevation	feet	525.43	524.13	524.84	527.58	525.78	525.52	524.94	523.89	525.49	525.79	523.69	529	528.62	--	525.36	523.81	
Oxygen, Dissolved	mg/L	0.19	0.98	2.4	0.43	0.19	0.2	0.13	0.21	0.16	0.14	0.05	0.1	1.12	0.28	0.13	0.08	
Turbidity	NTU	3	0.2	0.83	4.23	4.64	2.23	2.55	1.2	2.86	12.81	3.11	0	16.7	5.23	17.82	3.79	
pH at 25 Degrees C	Std. Units	7.1	7	7	7.2	7.2	7.3	6.9	7.1	7.1	7.4	7.3	7.1	7	7.2	7.1	7.2	
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	330	
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8	
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16000	
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4000	
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	330	
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18000	
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	24000	
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4400	
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2700	
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13000	

Single Location

Name: IPL - Burlington

Location ID: MW-310A			
Number of Sampling Dates: 2			
Parameter Name	Units	9/9/2020	10/16/2020
Boron	ug/L	2200	1200
Calcium	mg/L	150	62
Chloride	mg/L	18	16
Fluoride	mg/L	0.27	<0.23
Field pH	Std. Units	7.33	--
Sulfate	mg/L	100	130
Total Dissolved Solids	mg/L	570	620
Antimony	ug/L	1.1	1.5
Arsenic	ug/L	15	5.1
Barium	ug/L	290	90
Beryllium	ug/L	2.3	<0.27
Cadmium	ug/L	0.69	0.062
Chromium	ug/L	5.4	<1.1
Cobalt	ug/L	28	3.4
Lead	ug/L	20	3.5
Lithium	ug/L	32	36
Mercury	ug/L	<0.1	<0.1
Molybdenum	ug/L	19	33
Selenium	ug/L	1.5	<1
Thallium	ug/L	<0.26	--
Total Radium	pCi/L	4.91	0.878
Radium-226	pCi/L	2.48	0.662
Radium-228	pCi/L	2.44	0.215
Field Oxidation Potential	mV	145.3	--
Field Specific Conductance	umhos/cm	1026	--
Field Temperature	deg C	14.2	--
Groundwater Elevation	feet	509.16	489.84
Oxygen, Dissolved	mg/L	4.68	--
Turbidity	NTU	714.3	--
pH at 25 Degrees C	Std. Units	7.7	7.6
Bicarbonate Alkalinity as CaCO3	mg/L	--	410
Carbonate Alkalinity as CaCO3	mg/L	--	<3.8
Iron, dissolved	ug/L	--	<50
Manganese, dissolved	ug/L	--	420
Total Alkalinity as CaCO3	mg/L	--	410
Iron, total	ug/L	--	1600
Magnesium, total	ug/L	--	25000
Manganese, total	ug/L	--	470
Potassium, total	ug/L	--	6900
Sodium, total	ug/L	--	140000

Single Location

Name: IPL - Burlington

Location ID: MW-311		Number of Sampling Dates: 16															
Parameter Name	Units	4/21/2016	6/7/2016	8/16/2016	10/3/2016	1/9/2017	4/4/2017	6/12/2017	8/16/2017	10/16/2017	5/8/2018	8/14/2018	10/10/2018	4/4/2019	10/11/2019	6/2/2020	10/14/2020
Boron	ug/L	1810	2070	2320	2950	2160	2400	2130	360	2810	2200	2580	2820	1800	2800	2500	3500
Calcium	mg/L	200	164	158	150	164	176	158	139	145	173	156	130	200	150	190	140
Chloride	mg/L	125	75.4	77.4	62.7	78.7	83.3	81.1	45	50.9	79.9	69.9	54	110	65	120	61
Fluoride	mg/L	0.38	0.27	0.28	0.35	0.32	0.27	0.36	0.36	0.36	0.31	0.36	0.35	0.41	0.37	0.64	<0.23
Field pH	Std. Units	7.33	7.28	7.63	7.59	7.24	7.51	7.3	7.05	8.27	7.26	7.33	7.49	7.64	7.07	7.1	7.41
Sulfate	mg/L	283	179	170	161	179	184	173	112	119	176	144	127	230	130	220	110
Total Dissolved Solids	mg/L	1060	843	799	694	776	808	803	623	615	864	777	678	980	590	950	640
Antimony	ug/L	<0.058	0.12	<0.058	0.084	<0.058	<0.026	0.03	0.057	--	<0.026	<0.15	<0.078	<0.53	<0.53	<0.58	<0.51
Arsenic	ug/L	17.7	12.4	16.4	13	17.6	17.1	15.2	11.6	--	14	15.7	15.2	19	18	19	15
Barium	ug/L	292	248	232	229	244	240	248	198	--	256	239	214	280	210	300	220
Beryllium	ug/L	<0.08	<0.08	<0.08	<0.08	<0.08	0.036	0.013	<0.012	--	<0.023	<0.12	<0.089	<0.27	<0.27	<0.27	<0.27
Cadmium	ug/L	<0.029	<0.029	<0.029	<0.029	<0.029	<0.018	<0.018	<0.018	--	<0.018	<0.07	<0.033	<0.077	<0.039	<0.039	<0.049
Chromium	ug/L	0.45	0.42	0.51	<0.34	0.35	0.18	0.14	0.32	--	0.2	0.22	0.78	<0.98	<0.98	<1.1	<1.1
Cobalt	ug/L	0.52	<0.5	<0.5	<0.5	<0.5	0.27	0.35	0.24	--	0.3	0.37	0.57	0.45	0.27	0.81	0.28
Lead	ug/L	0.2	<0.19	<0.19	<0.19	<0.19	<0.033	0.32	0.096	--	0.043	0.13	0.48	0.37	<0.27	1.1	<0.11
Lithium	ug/L	<4.9	<4.9	<9.8	<4.9	<4.9	<2.9	<2.9	3.3	--	<4.6	<4.6	<4.6	<2.7	<2.7	<2.3	<2.5
Mercury	ug/L	<0.046	<0.039	<0.039	<0.039	<0.055	<0.046	<0.046	<0.046	--	<0.09	--	<0.09	<0.1	--	0.13	<0.1
Molybdenum	ug/L	10.4	11.7	12.5	14.7	10.9	12.4	11.2	16	--	11.6	13.9	16.3	8.5	15	11	23
Selenium	ug/L	0.19	<0.18	<0.18	<0.18	0.2	0.17	0.19	0.12	--	0.17	0.18	0.23	<1	<1	<1	<1
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.036	<0.036	0.14	--	<0.036	--	<0.099	<0.27	--	<0.26	--
Total Radium	pCi/L	0.831	1.22	1.19	0.22	1.19	1.13	0.785	1	--	0.987	0.969	0.819	0.815	0.599	0.802/0.802	0.297
Radium-226	pCi/L	0.207	0.18	0.605	0.149	0.299	0.484	0.445	0.653	--	0.183	0.502	0.245	0.198	0.354	0.324/0.324	0.104
Radium-228	pCi/L	0.624	1.04	0.581	0.0707	0.886	0.641	0.34	0.349	--	0.804	0.467	0.574	0.617	0.245	0.479/0.479	0.193
Field Oxidation Potential	mV	-129.9	-69.7	-139	-151.4	-171.4	-157.4	-102.5	-107.1	308.3	-143.3	-158	-62.2	145.8	-163.4	-1.1	-194
Field Specific Conductance	umhos/cm	1173	2425	2304	1833	2126	2059	865	1280	972	1282	1177	1003	1422	1088	1464	1041
Field Temperature	deg C	11.6	11.6	13	14.3	14.3	12.4	12.5	13.7	14.7	11.5	14.8	16.35	11.41	14.19	12.3	14.5
Groundwater Elevation	feet	523.72	521.8	522.92	527.34	525.16	524.01	523.55	521.12	523.44	525.08	521.06	528.49	528.2	--	524.05	520.59
Oxygen, Dissolved	mg/L	0.08	1.01	0.83	0.51	0.18	0.22	0.21	0.03	0.25	1.6	0.12	0.45	0.78	0.3	0.16	0.1
Turbidity	NTU	4.41	1.05	1.74	2.08	1.16	3	4.12	1.15	2.19	1.48	12.3	17.8	10.8	13.4	17.95	2.36
pH at 25 Degrees C	Std. Units	7	7.2	7.1	7.2	7.5	7.1	7	7.2	7.4	7.4	7.2	7.1	7	7.2	7	7.1
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	380
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3.8
Iron, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16000
Manganese, dissolved	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4300
Total Alkalinity as CaCO3	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	380
Iron, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16000
Magnesium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30000
Manganese, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4200
Potassium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2300
Sodium, total	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	36000

Single Location

Name: IPL - Burlington

Location ID: MW-312					
Number of Sampling Dates: 4					
Parameter Name	Units	6/6/2019	10/10/2019	6/3/2020	10/15/2020
Boron	ug/L	6100	6600	6700	6500
Calcium	mg/L	67	71	74	78
Chloride	mg/L	27	25	36	23
Fluoride	mg/L	1.1	0.25	0.57	<0.23
Field pH	Std. Units	6.99	7.19	7.13	7.37
Sulfate	mg/L	220	230	200	210
Total Dissolved Solids	mg/L	540	510	670	560
Antimony	ug/L	<0.53	<0.53	<0.58	<0.51
Arsenic	ug/L	14	15	22	19
Barium	ug/L	160	150	190	200
Beryllium	ug/L	<0.27	<0.54	<0.27	<0.27
Cadmium	ug/L	<0.077	0.044	0.095	0.066
Chromium	ug/L	<0.98	<0.98	<1.1	<1.1
Cobalt	ug/L	0.65	0.36	0.67	0.5
Lead	ug/L	0.54	<0.27	<0.27	<0.11
Lithium	ug/L	24	27	22	27
Mercury	ug/L	<0.1	--	<0.1	<0.1
Molybdenum	ug/L	290	280	320	290
Selenium	ug/L	<1	<1	<1	<1
Thallium	ug/L	<0.27	--	<0.26	--
Total Radium	pCi/L	0.875	0.438	0.543/0.543	0.627
Radium-226	pCi/L	0.301	0.433	0.356/0.356	0.443
Radium-228	pCi/L	0.574	0.00445	<0.323/0.187	0.184
Field Oxidation Potential	mV	-146.4	-163.8	53.3	-203.1
Field Specific Conductance	umhos/cm	783	785	878	854
Field Temperature	deg C	14.4	15.6	14.7	15.1
Groundwater Elevation	feet	--	--	524.05	518.68
Oxygen, Dissolved	mg/L	0.12	8.75	0.17	0.13
Turbidity	NTU	2.86	2.56	21.16	0.02
pH at 25 Degrees C	Std. Units	7.5	7.3	7.1	7.2
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	240
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	<3.8
Iron, dissolved	ug/L	--	--	--	11000
Manganese, dissolved	ug/L	--	--	--	8200
Molybdenum, dissolved	ug/L	--	--	--	300
Total Alkalinity as CaCO3	mg/L	--	--	--	240
Iron, total	ug/L	--	--	--	11000
Magnesium, total	ug/L	--	--	--	12000
Manganese, total	ug/L	--	--	--	7900
Potassium, total	ug/L	--	--	--	11000
Sodium, total	ug/L	--	--	--	73000

Single Location

Name: IPL - Burlington

Location ID: MW-313					
Number of Sampling Dates: 4					
Parameter Name	Units	6/6/2019	10/10/2019	6/3/2020	10/15/2020
Boron	ug/L	7400	8500	8600	7600
Calcium	mg/L	110	120	120	110
Chloride	mg/L	85	51	83	50
Fluoride	mg/L	0.33	0.28	0.52	<0.23
Field pH	Std. Units	6.94	7.06	7.03	7.16
Sulfate	mg/L	210	210	230	170
Total Dissolved Solids	mg/L	700	520	830	640
Antimony	ug/L	<0.53	<0.53	<0.58	<0.51
Arsenic	ug/L	5.5	6.3	6.9	5.5
Barium	ug/L	510	490	680	610
Beryllium	ug/L	<0.27	<1.1	<0.27	<0.27
Cadmium	ug/L	<0.077	<0.039	0.039	<0.049
Chromium	ug/L	<0.98	<0.98	<1.1	<1.1
Cobalt	ug/L	0.41	0.32	0.23	0.19
Lead	ug/L	<0.27	0.31	<0.27	<0.11
Lithium	ug/L	43	62	52	51
Mercury	ug/L	<0.1	--	0.13	<0.1
Molybdenum	ug/L	130	110	130	100
Selenium	ug/L	<1	<1	<1	<1
Thallium	ug/L	<0.27	--	<0.26	--
Total Radium	pCi/L	0.987	1.7	1.81/1.81	1.26
Radium-226	pCi/L	0.532	0.968	1.18/1.18	0.52
Radium-228	pCi/L	0.455	0.736	0.631/0.631	0.739
Field Oxidation Potential	mV	-141.6	-163.4	50.9	-183.3
Field Specific Conductance	umhos/cm	1059	1007	1099	999
Field Temperature	deg C	14.9	16.04	17.2	15.3
Groundwater Elevation	feet	--	--	524.02	518.7
Oxygen, Dissolved	mg/L	0.07	0.37	0.29	0.14
Turbidity	NTU	7.23	11.03	50.81	14.3
pH at 25 Degrees C	Std. Units	7.4	7.2	7.1	7.2
Bicarbonate Alkalinity as CaCO3	mg/L	--	--	--	380
Carbonate Alkalinity as CaCO3	mg/L	--	--	--	<3.8
Iron, dissolved	ug/L	--	--	--	14000
Molybdenum, dissolved	ug/L	--	--	--	100
Total Alkalinity as CaCO3	mg/L	--	--	--	380
Iron, total	ug/L	--	--	--	15000
Magnesium, total	ug/L	--	--	--	21000
Manganese, total	ug/L	--	--	--	6300
Potassium, total	ug/L	--	--	--	14000
Sodium, total	ug/L	--	--	--	58000
Lithium, dissolved	ug/L	--	--	--	53

Single Location

Name: IPL - Burlington

Location ID: MW-313A			
Number of Sampling Dates: 2			
Parameter Name	Units	9/9/2020	10/15/2020
Boron	ug/L	4300	4200
Calcium	mg/L	48	44
Chloride	mg/L	210	200
Fluoride	mg/L	<0.23	<0.23
Field pH	Std. Units	7.6	7.64
Sulfate	mg/L	200	190
Total Dissolved Solids	mg/L	730	660
Antimony	ug/L	<0.51	<0.51
Arsenic	ug/L	<0.88	<0.88
Barium	ug/L	270	270
Beryllium	ug/L	<0.27	<0.27
Cadmium	ug/L	<0.049	<0.049
Chromium	ug/L	<1.1	<1.1
Cobalt	ug/L	<0.091	<0.091
Lead	ug/L	<0.11	<0.11
Lithium	ug/L	13	13
Mercury	ug/L	<0.1	<0.1
Molybdenum	ug/L	120	120
Selenium	ug/L	<1	<1
Thallium	ug/L	<0.26	--
Total Radium	pCi/L	1.5	0.914
Radium-226	pCi/L	0.513	0.431
Radium-228	pCi/L	0.984	0.483
Field Oxidation Potential	mV	-164.4	-190.1
Field Specific Conductance	umhos/cm	1243	1133
Field Temperature	deg C	15.3	14.8
Groundwater Elevation	feet	515.36	518.61
Oxygen, Dissolved	mg/L	0.21	0.1
Turbidity	NTU	0	0.02
pH at 25 Degrees C	Std. Units	7.7	7.5
Bicarbonate Alkalinity as CaCO3	mg/L	--	88
Carbonate Alkalinity as CaCO3	mg/L	--	<1.9
Iron, dissolved	ug/L	--	1700
Manganese, dissolved	ug/L	--	680
Molybdenum, dissolved	ug/L	--	120
Total Alkalinity as CaCO3	mg/L	--	88
Iron, total	ug/L	--	1600
Magnesium, total	ug/L	--	4300
Manganese, total	ug/L	--	670
Potassium, total	ug/L	--	12000
Sodium, total	ug/L	--	160000

Appendix E

Statistical Evaluation

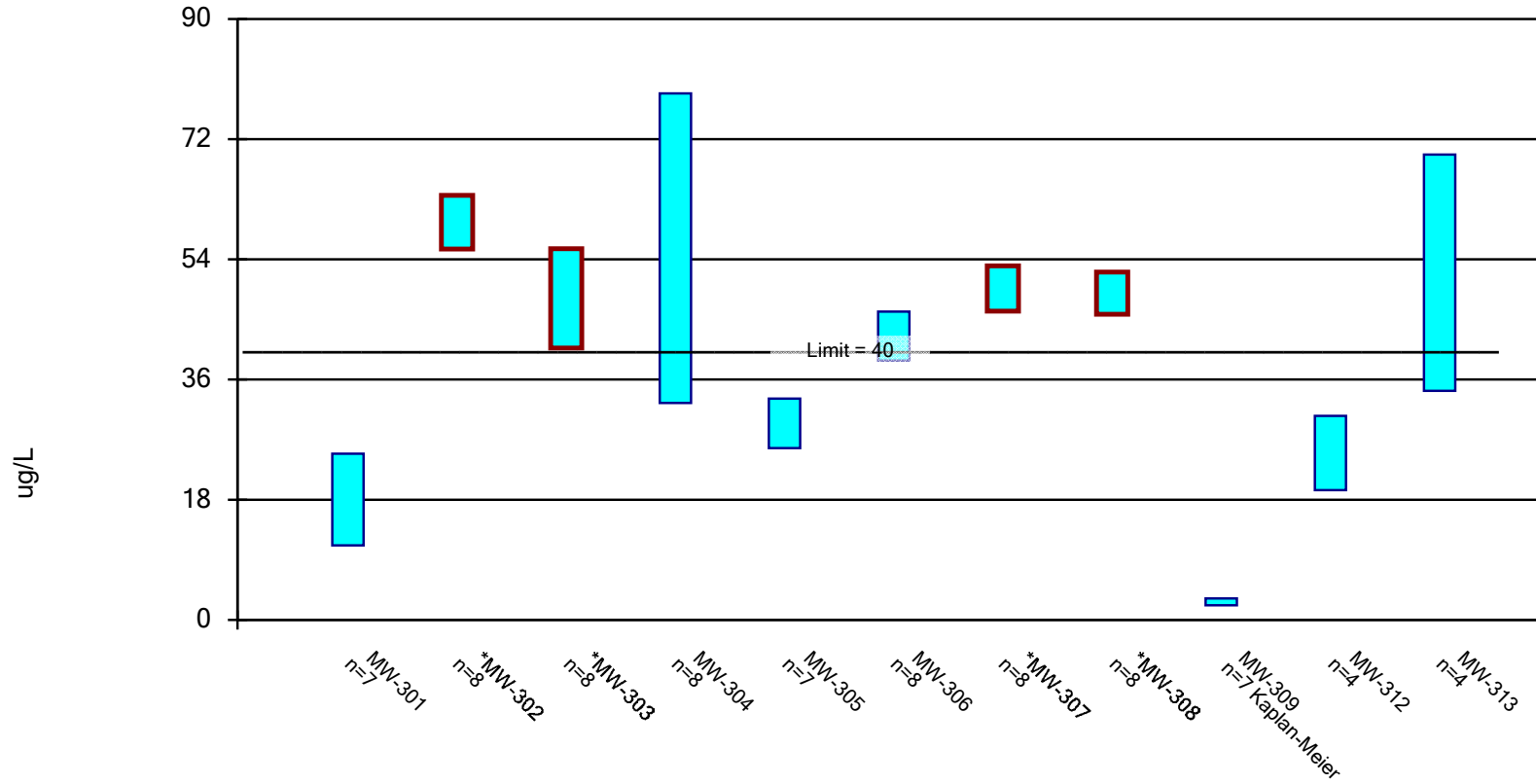
Confidence Interval

Burlington Generating Station Client: SCS Engineers Data: BGS_Export_201121_Rev Printed 1/23/2021, 4:54 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (ug/L)	MW-301	24.89	11.17	40	No	7	0	None	No	0.01	Param.
Lithium (ug/L)	MW-302	63.58	55.55	40	Yes	8	0	None	No	0.01	Param.
Lithium (ug/L)	MW-303	55.59	40.71	40	Yes	8	0	None	No	0.01	Param.
Lithium (ug/L)	MW-304	78.86	32.49	40	No	8	0	None	No	0.01	Param.
Lithium (ug/L)	MW-305	33.13	25.73	40	No	7	0	None	No	0.01	Param.
Lithium (ug/L)	MW-306	46.18	38.82	40	No	8	0	None	No	0.01	Param.
Lithium (ug/L)	MW-307	53.01	46.24	40	Yes	8	0	None	No	0.01	Param.
Lithium (ug/L)	MW-308	52.1	45.78	40	Yes	8	0	None	No	0.01	Param.
Lithium (ug/L)	MW-309	3.204	2.196	40	No	7	71.43	Kapla...	No	0.01	Param.
Lithium (ug/L)	MW-312	30.56	19.44	40	No	4	0	None	No	0.01	Param.
Lithium (ug/L)	MW-313	69.68	34.32	40	No	4	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-301	122.7	67.63	100	No	8	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-302	133.8	104.7	100	Yes	8	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-303	97.83	58.11	100	No	7	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-304	122.8	40.02	100	No	8	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-305	1.02	0.7062	100	No	6	50	Kapla...	No	0.01	Param.
Molybdenum (ug/L)	MW-306	86.05	79.98	100	No	7	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-307	161.8	119.2	100	Yes	8	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-308	142.5	112.5	100	Yes	8	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-309	97.39	43.18	100	No	7	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-312	334.3	255.7	100	Yes	4	0	None	No	0.01	Param.
Molybdenum (ug/L)	MW-313	151.6	83.44	100	No	4	0	None	No	0.01	Param.

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.05.



Constituent: Lithium Analysis Run 1/23/2021 4:52 PM

Burlington Generating Station Client: SCS Engineers Data: BGS_Export_201121_Rev

Confidence Interval

Constituent: Lithium (ug/L) Analysis Run 1/23/2021 4:54 PM

Burlington Generating Station Client: SCS Engineers Data: BGS_Export_201121_Rev

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307	MW-308	MW-309
5/8/2018								46	<4.6 (U)
5/9/2018	17.8	65.4	50.7	63.8	27.8	36.6	47.8		
8/13/2018	18.9	61.4	42.1	34.3	33.6			52	
8/14/2018						46.8	56.1		<4.6 (U)
10/9/2018	24.5	57.8							
10/10/2018			35.8	82.4	27.6	41.4	45.4	43.6	<4.6 (U)
3/11/2019						39.2	50.7		
3/12/2019		59.9	51.6	35.9				48.9	
4/3/2019	13	56	52	52	29	45	50	50	
4/4/2019									3.3 (J)
6/6/2019									
10/10/2019	26	57	46	38				52	
10/11/2019					26	46	48		<5.4 (U)
6/3/2020	16	55	48	47	28				2.4 (J)
6/4/2020						43	48	48	
10/14/2020								51	<2.5
10/15/2020				92	34	42	51		
10/16/2020	10	64	59						
Mean	18.03	59.56	48.15	55.68	29.43	42.5	49.63	48.94	2.364
Std. Dev.	5.775	3.788	7.018	21.87	3.116	3.472	3.198	2.979	0.6115
Upper Lim.	24.89	63.58	55.59	78.86	33.13	46.18	53.01	52.1	3.204
Lower Lim.	11.17	55.55	40.71	32.49	25.73	38.82	46.24	45.78	2.196

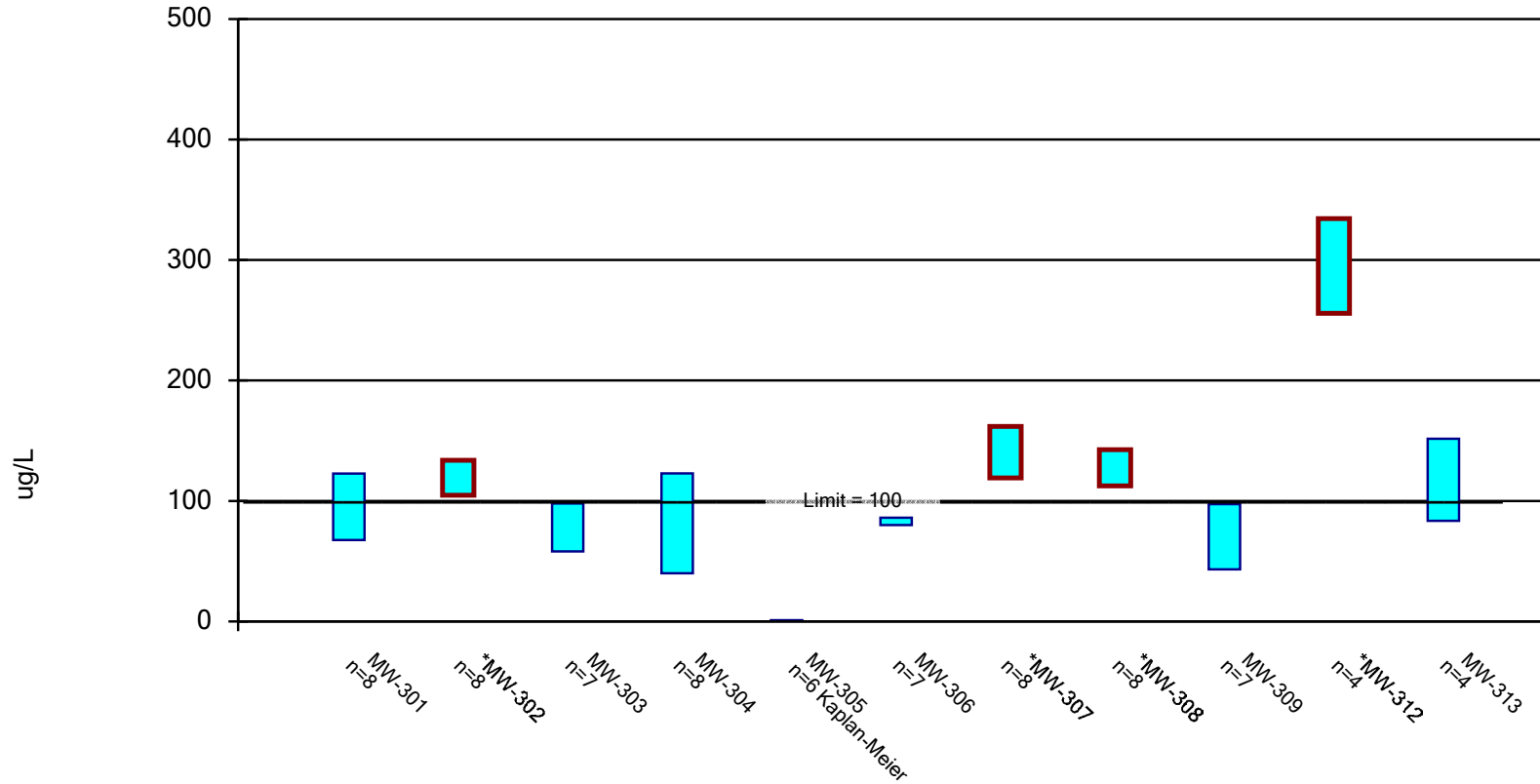
Confidence Interval

Constituent: Lithium (ug/L) Analysis Run 1/23/2021 4:54 PM
Burlington Generating Station Client: SCS Engineers Data: BGS_Export_201121_Rev

	MW-312	MW-313
5/8/2018		
5/9/2018		
8/13/2018		
8/14/2018		
10/9/2018		
10/10/2018		
3/11/2019		
3/12/2019		
4/3/2019		
4/4/2019		
6/6/2019	24	43
10/10/2019	27	62
10/11/2019		
6/3/2020	22	52
6/4/2020		
10/14/2020		
10/15/2020	27	51
10/16/2020		
Mean	25	52
Std. Dev.	2.449	7.789
Upper Lim.	30.56	69.68
Lower Lim.	19.44	34.32

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk at Alpha = 0.05.



Constituent: Molybdenum Analysis Run 1/23/2021 4:52 PM

Burlington Generating Station Client: SCS Engineers Data: BGS_Export_201121_Rev

Confidence Interval

Constituent: Molybdenum (ug/L) Analysis Run 1/23/2021 4:54 PM

Burlington Generating Station Client: SCS Engineers Data: BGS_Export_201121_Rev

	MW-301	MW-302	MW-303	MW-304	MW-305	MW-306	MW-307	MW-308	MW-309
5/8/2018								140	43.4
5/9/2018	113	118	75.4	126	0.87 (J)	84.7	154		
8/13/2018	81.7	121	77.9	74.9	1			140	
8/14/2018						82.9	155		52.8
10/9/2018	120	122							
10/10/2018			56.5	113	0.72 (J)	83.5	159	145	71.8
3/11/2019							156		
3/12/2019	62.7	123		47.4				135	
4/3/2019	77	100	110	58	<1.1 (U)	78	100	110	
4/4/2019									47
6/6/2019									
10/10/2019	130	100	76	47				120	
10/11/2019					<1.1 (U)	84	130		90
6/3/2020	110	140	66	45	<1.1 (U)				87
6/4/2020						86	130	120	
10/14/2020								110	100
10/15/2020				140		82	140		
10/16/2020	67	130	84						
Mean	95.18	119.3	77.97	81.41	0.7067	83.01	140.5	127.5	70.29
Std. Dev.	25.99	13.7	16.72	39.05	0.1931	2.554	20.13	14.14	22.82
Upper Lim.	122.7	133.8	97.83	122.8	1.02	86.05	161.8	142.5	97.39
Lower Lim.	67.63	104.7	58.11	40.02	0.7062	79.98	119.2	112.5	43.18

Confidence Interval

Constituent: Molybdenum (ug/L) Analysis Run 1/23/2021 4:54 PM
Burlington Generating Station Client: SCS Engineers Data: BGS_Export_201121_Rev

	MW-312	MW-313
5/8/2018		
5/9/2018		
8/13/2018		
8/14/2018		
10/9/2018		
10/10/2018		
3/11/2019		
3/12/2019		
4/3/2019		
4/4/2019		
6/6/2019	290	130
10/10/2019	280	110
10/11/2019		
6/3/2020	320	130
6/4/2020		
10/14/2020		
10/15/2020	290	100
10/16/2020		
Mean	295	117.5
Std. Dev.	17.32	15
Upper Lim.	334.3	151.6
Lower Lim.	255.7	83.44