

Water Quality Monitoring Report First 2021 Semi-Annual Event

Vista Landfill Class III

Vista Landfill, LLC



July 23, 2021

PREPARED FOR:



Vista Landfill, LLC
242 West Keene Road
Apopka, Florida 32703

PREPARED BY:



Carlson Environmental Consultants
305 South Main Street
Monroe, North Carolina 28112

STATEMENT OF GEOLOGIC REVIEW

In general accordance with Chapter 62-701, Florida Administrative Code (F.A.C.), Solid Waste Management Facilities, this Groundwater Monitoring Report – First 2021 Semi-Annual Monitoring Event for the Vista Landfill Site, located in Apopka, Florida, has been reviewed, signed and sealed by a registered Professional Geologist in the State of Florida, and is consistent with standard principles related to groundwater monitoring


Ken E. Guilbeault, P.G.
Florida License # 2907

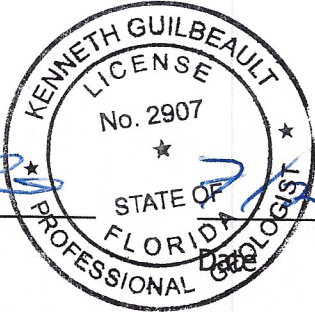
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Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form #: 62-701 900(31), F.A.C.

Form Title: Water Quality Monitoring Certification

Effective Date: January 6, 2010

Incorporated in Rule 62-701 510(9), F.A.C.

WATER QUALITY MONITORING CERTIFICATION

PART I GENERAL INFORMATION

(1) Facility Name Vista Landfill, LLC., Class III

Address 242 West Keene Road

City Apopka Zip 32703 County Orange

Telephone Number (407) 286-2920

(2) WACS Facility ID 87801

(3) DEP Permit Number 0165969-030-SO-MM

(4) Authorized Representative's Name Sheree Grant Title Environmental Protection

Address 5110 US Hwy 301

City Baldwin Zip 32234 County Duval

Telephone Number (407) 902-1469

Email address (if available) sgrant@wm.com

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

7/23/2021
(Date)

Sheree Grant
(Owner or Authorized Representative's Signature)

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Atlantic Coast Consulting, Inc. (F.K.A. - 920045 - ProTech)

Analytical Lab NELAC / HRS Certification # NELAP Certification E87487

Lab Name Pace Analytical National (Pace)

Address 12065 Lebanon Road, Mount Juliet, TN 37122

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561-881-6600

1 INTRODUCTION

The Vista Landfill Class III (Site or VLF) is owned and operated by Vista Landfill, LLC in accordance with Florida Department of Environmental Protection (FDEP) Operation Permit Number 0165969-030-SO issued November 2, 2017. The Site is an active Class III waste landfill that serves Orange County in central Florida.

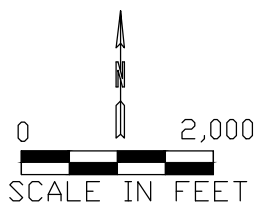
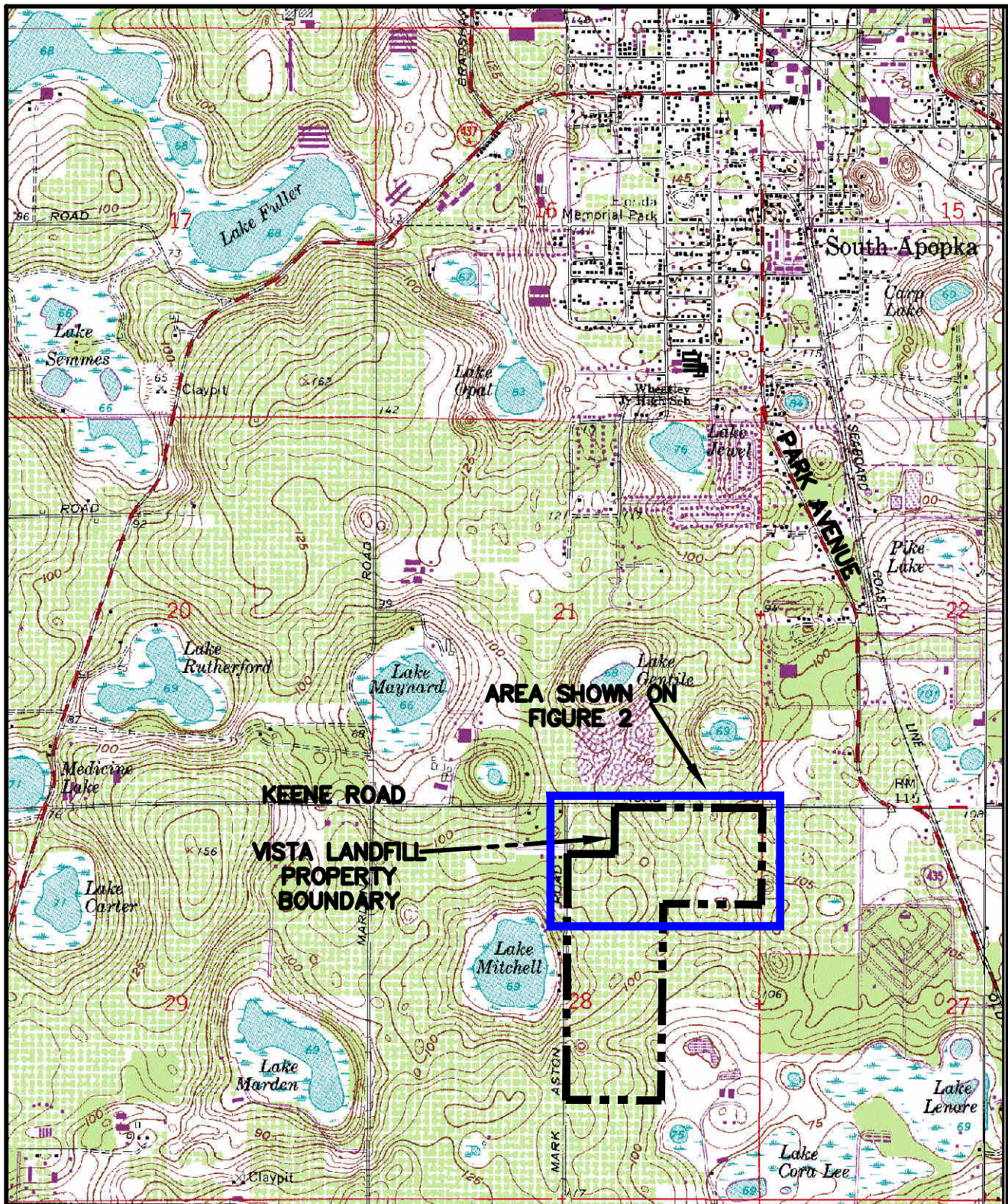
Carlson Environmental Consultants, PC (CEC) has been retained to report the results of semi-annual groundwater monitoring at the Site in accordance with the Monitoring Plan Implementation Schedule (MPIS) (Appendix 3) of the referenced permit.

This report was prepared in accordance with Florida Department of Environmental Protection (FDEP) Permit/Certification No. 0165969-030-SO, Specific Condition Section 2.D, MPIS, and Chapter 62-701.510(8)(a) Florida Administrative Code (FAC). The Permit expires on June 1, 2036.

The first semi-annual 2021 sampling data was obtained during the routine semi-annual monitoring event conducted June 7 and 8, 2021 (Appendix A). An electronic data deliverable (EDD) of the results in "ADaPT format" is attached as Appendix B. This EDD has been verified as uploadable into the latest version of ADaPT.

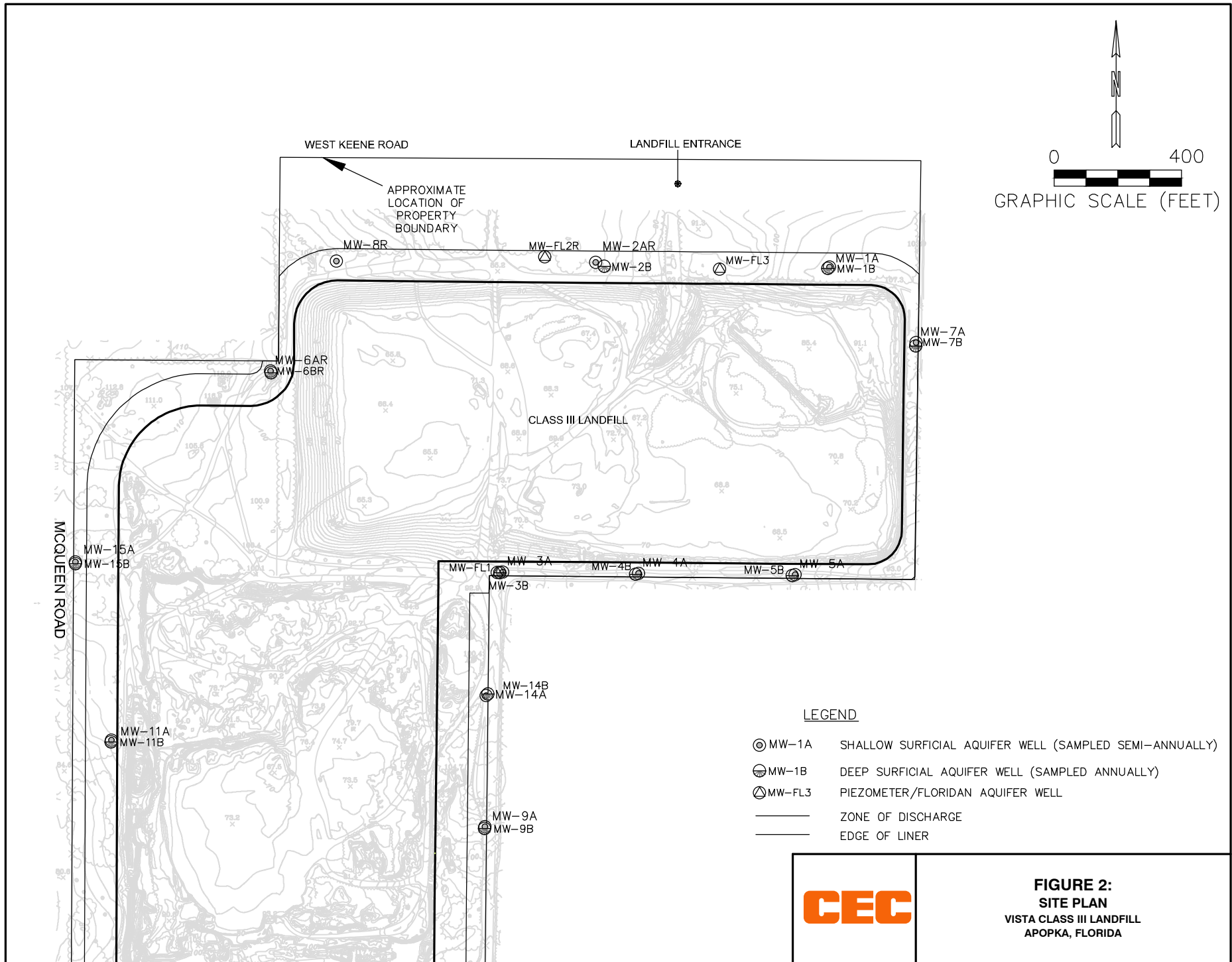
2 SITE LOCATION AND DESCRIPTION

The Site is located approximately two miles south of Apopka, Florida, at 242 West Keene Road. The VLF lies south of Keene Road, west of Old Apopka-Clarcona Road, and east of Lake Mitchell in Orange County Florida (Figure 1). The Site is a Class III lined landfill with a leachate collection system. The bottom-liner system consists of three layers (from top to bottom): a 2-foot thick sand liner protective layer, a double-sided geocomposite drainage layer, and a 60-mil high density polyethylene (HDPE) geomembrane layer. Waste was initially placed in the landfill on November 17, 2008. The locations of the monitoring sites are shown on Figure 2.



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FIGURE 1:
SITE LOCATION MAP
VISTA CLASS III LANDFILL
APOPKA, FLORIDA



3 MONITORING PROGRAM

The monitoring program consists of Shallow and Intermediate surficial aquifer groundwater monitoring and Floridan Aquifer groundwater monitoring. Semi-annual reporting of the results of groundwater sampling is performed in accordance with the Site's MPIS and rule 62-701.730 (8)(c).

3.1 Groundwater Monitoring Program

The surficial aquifer groundwater currently is monitored at the site at 23 locations. The surficial aquifer is monitored in two zones: the shallow zone ("A" wells) and the lower zone ("B" wells). The shallow zone is monitored semi-annually and the lower zone is sampled annually, during the December sampling event. The lower zone wells were sampled during the December 2020 sampling event. The deep zone wells are used as piezometers with no routine sampling unless there are verified landfill impacts in the lower zone water unit.

Well and well/piezometer locations are shown on Figure 2. The monitoring wells, with their monitored zone and permitted designations as background or compliance, are listed in Table 1. The construction details for the 26 monitoring wells and piezometers comprising the monitoring system are included in Table 2.

Table 1. Active Surficial Aquifer Groundwater Monitoring Wells at the Vista Landfill

Shallow Zone	Lower Zone
Background Monitoring Wells	
MW-1A	MW-1B
MW-2AR	MW-2B
MW-6AR	MW-6BR
MW-7A	
MW-8R	
Compliance Monitoring Wells	
MW-3A	MW-3B
MW-4A	MW-4B
MW-5A	MW-5B
	MW-7B
MW-9A	MW-9B
MW-11A	MW-11B
MW-14A	MW-14B
MW-15A	MW-15B

Note:

1. Wells listed on the same row are part of a cluster of wells.

TABLE 2. EXISTING MONITORING LOCATIONS AND CONSTRUCTION DETAILS, VISTA LANDFILL, APOPKA, FLORIDA

WACS ID	Water Quality Monitoring Site ID	Date Installed	Date Abandoned	Well Type	Aquifer Monitored	Top of Casing Elevation (NGVD)	Total Well Depth (Feet BLS)	Outer Casing Diameter/ Depth	Well Diameter	Screen Slot Size	Screen Length (feet)	Top of Screen (Feet BLS)	Bottom of Screen (Feet BLS)	Top of Screen (Feet NGVD)	Bottom of Screen (Feet NGVD)	Northing (NAD 1983)	Easting (NAD 1983)	Latitude (NAD 1983)	Longitude (NAD 1983)
19335	MW-1A ¹	4/20/2004	NA	BG	Shallow Surficial	109.47	69	NA	2	0.006	20	49	69	57	37	1565469.28	492550.11	28° 38' 21.30"	81° 30' 36.28"
19336	MW-1B	4/20/2004	NA	BG	Intermediate Surficial	109.53	96	NA	2	0.010	10	86	96	20	10	1565465.40	492545.32	28° 38' 21.27"	81° 30' 36.33"
19337	MW-2AR	1/23/2007	NA	BG	Shallow Surficial	87.22	39.94	NA	2	0.006	10	29.44	39.44	59.91	49.91	1565481.98	491815.07	28° 38' 21.40"	81° 30' 44.53"
19338	MW-2B	4/22/2004	NA	BG	Intermediate Surficial	88.46	73	NA	2	0.006	10	63	73	20	10	1565471.82	491843.09	28° 38' 21.30"	81° 30' 44.21"
19339	MW-3A	4/13/2004	NA	CO	Shallow Surficial	92.87	56	NA	2	0.006	30	36	56	57	37	1564509.87	491522.95	28° 38' 11.76"	81° 30' 47.76"
19340	MW-3B	4/13/2004	NA	CO	Intermediate Surficial	93.06	83	NA	2	0.010	10	73	83	20	10	1564509.53	491514.75	28° 38' 11.76"	81° 30' 47.85"
19341	MW-4A	4/14/2004	NA	CO	Shallow Surficial	82.04	42	NA	2	0.006	20	22	42	57	37	1564505.59	491949.09	28° 38' 11.74"	81° 30' 42.98"
19342	MW-4B	4/14/2004	NA	CO	Intermediate Surficial	83.18	69	NA	2	0.006	10	59	69	20	10	1564505.16	491941.64	28° 38' 11.73"	81° 30' 43.06"
19343	MW-5A	4/14/2004	NA	CO	Shallow Surficial	81.86	40	NA	2	0.006	20	20	40	57	37	1564500.86	492441.55	28° 38' 11.71"	81° 30' 37.45"
19344	MW-5B	4/14/2004	NA	CO	Intermediate Surficial	81.27	67	NA	2	0.006	10	57	67	20	10	1564500.47	492433.39	28° 38' 11.71"	81° 30' 37.54"
19345	MW-6AR	1/30/2007	NA	BG	Shallow Surficial	104.11	69.37	NA	2	0.010	20	48.87	68.87	52.27	32.27	1565140.42	490793.55	28° 38' 17.97"	81° 30' 55.98"
19346	MW-6BR	1/30/2007	NA	BG	Intermediate Surficial	103.99	88.58	NA	2	0.010	10	78.08	88.08	22.98	12.98	1565137.25	490795.56	28° 38' 17.94"	81° 30' 55.95"
19347	MW-7A	4/20/2004	NA	BG	Shallow Surficial	109.26	69	NA	2	0.006	20	49	69	57	37	1565230.04	492821.74	28° 38' 18.95"	81° 30' 33.22"
19348	MW-7B	4/19/2004	NA	CO	Intermediate Surficial	109.13	96	NA	2	0.01	10	86	96	20	10	1565222.30	492821.61	28° 38' 18.87"	81° 30' 33.22"
19868	MW-8R	1/25/2007	NA	BG	Shallow Surficial	99.6	72.12	NA	2	0.006	10	61.62	71.72	35.05	25.05	1565489.06	490997.80	28° 38' 21.43"	81° 30' 53.70"
19869	MW-9A	5/26/2017	NA	CO	Shallow Surficial	99.45	60	NA	2	0.010	20	40	60			1563710.84	491467.69	28° 38' 03.85"	81° 30' 48.345"
19870	MW-9B	5/26/2017	NA	CO	Lower Surficial	99.52	85	NA	2	0.006	10	75	85			1563705.66	491466.69	28° 38' 03.79"	81° 30' 48.355"
19873	MW-11A	8/18/2017	NA	DE	Shallow Surficial	96.35	55	NA	2	0.010	20	35	55			1563983.69	490293.90	28° 38' 03.79"	81° 30' 48.355"
19874	MW-11B	8/25/2017	NA	DE	Lower Surficial	96.37	85	NA	2	0.006	10	75	85			1563977.43	490292.60	28° 38' 06.437"	81° 30' 01.542"
21926	MW-14A	5/26/2017	NA	CO	Shallow Surficial	100.62	55	NA	2	0.010	20	35	55			1564122.62	491470.84	28° 38' 07.927"	81° 30' 48.306"
21927	MW-14B	ND	NA	CO	Lower Surficial	100.1	ND	ND	2	ND	ND	ND	ND	ND	ND	1564128.82	491477.36	28° 38' 07.987"	81° 30' 48.254"
21928	MW-15A	5/26/2017	NA	CO	Shallow Surficial	105.27	65	NA	2	0.010	20	45	65			1564542.92	490180.97	28° 38' 12.032"	81° 31' 02.823"
21929	MW-15B	5/26/2017	NA	CO	Lower Surficial	105.15	90	NA	2	0.006	10	80	90			1564537.75	490180.69	28° 38' 11.979"	81° 31' 02.823"
19879	MW-FL1	4/13/2004	NA	CO	Floridan	93.16	125	NA	2	0.010	10	115	125	-45	-35	1564509.43	491507.05	28° 38' 11.76"	81° 30' 47.94"
19880	MW-FL2R	1/29/2007	NA	CO	Deep Surficial	86.76	129.95	6"/0' to 80'	2	0.006	10	119.45	129.45	-45.54	-35.54	1565501.29	491655.91	28° 38' 21.58"	81° 30' 46.32"
19881	MW-FL3	4/21/2004	NA	CO	Floridan	97.49	140	NA	2	0.010	10	130	140	-45	-35	1565463.35	492205.45	28° 38' 21.23"	81° 30' 40.15"

Notes:

- Survey Information was obtained from the May 25, 2007 Geosyntec Consultants Environmental Monitoring Location Map.
- Well construction information obtained from the July 2004, Collinas Group, Inc., Groundwater Monitoring Well Installation Report, Buttrey Landfill Parcel.
- Well construction information obtained from the March 15, 2007, Professional Service Industries, Inc., Monitoring Well Completion and Well Abandonment Report.
- NGVD = National Geodetic Vertical Datum of 1929.
- NAD 1983 = North American Datum of 1983.
- WACS = State Water Assurance Compliance System.
- BLS = Below Landsurface.
- NA = Not Applicable.
- BG = Background.
- CO = Compliance.
- ND = Data not available.
- OT = Other.
- ID = Identification.
- DE= Detection.

The current permit requires semi-annual sampling of the shallow zone and annual sampling of the lower zone for the field and laboratory parameters listed below.

Field Parameters

- Static Water Level (before purging)
- Specific Conductivity
- pH
- Dissolved Oxygen
- Turbidity
- Temperature

Shallow Zone Laboratory Parameters

- Total ammonia-nitrogen
- Chloride
- Iron
- Mercury
- Nitrate
- Sodium
- Total dissolved solids (TDS)
- Parameters listed in 40 Code of Federal Regulations (CFR) Part 258, Appendix I

Lower Zone Laboratory Parameters

- Total ammonia-nitrogen
- Chloride
- Sodium
- Nitrate

Lower zone wells should be sampled for the full list of parameters (see shallow zone laboratory parameters) if:

- The shallow well for the well cluster(s) shows a verified landfill impact; or
- The indicator data suggests through an increasing trend (or verified sudden jump far above background) that there is a landfill impact to the lower zone well(s).

3.2 Sample Collection Analysis

Groundwater sampling was conducted in accordance with F.A.C. Chapter 62-160 and FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Atlantic Coast Consulting, Inc. (ACC) field personnel collected groundwater samples for laboratory analysis from all monitoring wells listed in Section 3.1 between June 7 and 8, 2021.

Groundwater monitoring wells that were sampled were purged with dedicated QED bladder pumps with Teflon-lined tubing extending to the top of the well casing. Wells were purged using low-flow sampling methods; a minimum of one well volume was purged prior to stabilization for wells where the water table is located within the well screen. Field parameters including static water level, pH, specific conductance, temperature, turbidity, dissolved oxygen, oxidation-reduction potential and color/sheen (by observation) were recorded during purging and prior to sampling. Once purging was complete, ACC field personnel collected groundwater samples from the dedicated pumps and tubing in laboratory-provided containers, and placed the samples in coolers with ice. Pace Analytical National (Pace) is certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP).

4 GEOLOGIC AND HYDROGEOLOGIC CHARACTERISTICS

Figure 1 shows the topography of the Site and region prior to the site being developed as a borrow pit and then as a landfill. The topography indicates the site is located in a region that is internally drained.

Based on evaluation of the Site hydrogeologic data, the groundwater at the Site primarily occurs in the Hawthorn Group and the underlying Floridan aquifer. The “surficial aquifer” consists of the water-bearing permeable zones of the Hawthorn Group that overlay the Floridan aquifer. The groundwater flow direction of the lower Hawthorn Group tends to mimic the pre-construction topography of the Site.

The Floridan aquifer underlies the surficial aquifer at the Site and is separated from it by the clay units of the Hawthorn Group.¹ Karst features (e.g., sinkholes) developed historically in the sediments overlying the upper Floridan aquifer, resulting in the internal drainage characteristics of the region. As a result, runoff and surficial aquifer groundwater flow moves toward and into these karst features, often resulting in development of surface water bodies such as Lake Mitchell, which is located west of the Site (Figure 1).

For this semi-annual report, CEC performed the groundwater flow assessment of the surficial aquifer using groundwater depth to water measurements obtained on June 7, 2021. The assessment included the compilation of groundwater depth measurements, the calculation of groundwater elevations, and plotting the data onto site figures depicting the estimated groundwater flow direction. Table 3 lists the monitoring locations, depths to water, and groundwater elevations. Water level maps generated for the shallow surficial aquifer and lower surficial aquifer are presented in Figures 3 and 4. These maps are generated using Surfer® Version 16, groundwater contouring computer program, with the interpretation verified by an CEC hydrogeologist.

4.1 Shallow Surficial Aquifer (Upper Zone)

The shallow surficial aquifer is defined here as the uppermost water-bearing zone of the undifferentiated sands and clayey sands that are part of the Hawthorn Group. A water level map of the shallow surficial aquifer was prepared from shallow surficial well data for the June 2021 sampling event and is provided on Figure 3.

Groundwater flow typically is expected to be perpendicular to the water level contours. Therefore, the approximate direction of groundwater flow in the shallow surficial aquifer is primarily to the southwest. A portion of the groundwater enters from the northwest section of the site and flows south. At MW-14A, there is a groundwater high and flow radiates outward. This groundwater flow configuration results from a combination of recharge from rainfall infiltration outside the bottom liner, interchange of groundwater with the underlying intermediate surficial aquifer, and

¹ The Rust Environment and Infrastructure (RUST) August 1996 (Revised September 1998) report entitled “Keene Road Hydrogeologic Evaluation” Prepared for Waste Management Inc.

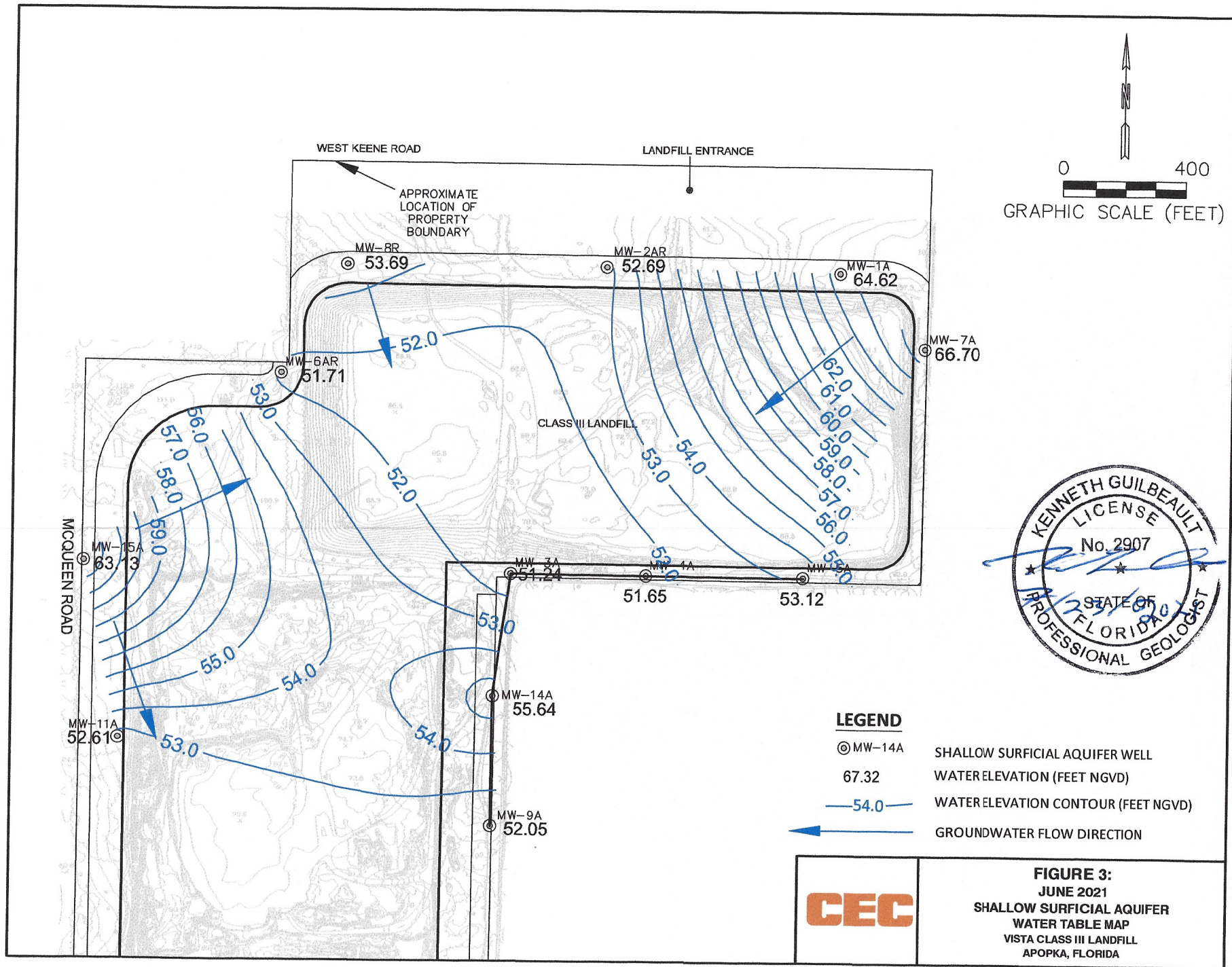
**Table 3. Groundwater Elevation Measurements
Vista Landfill, Apopka, Florida**

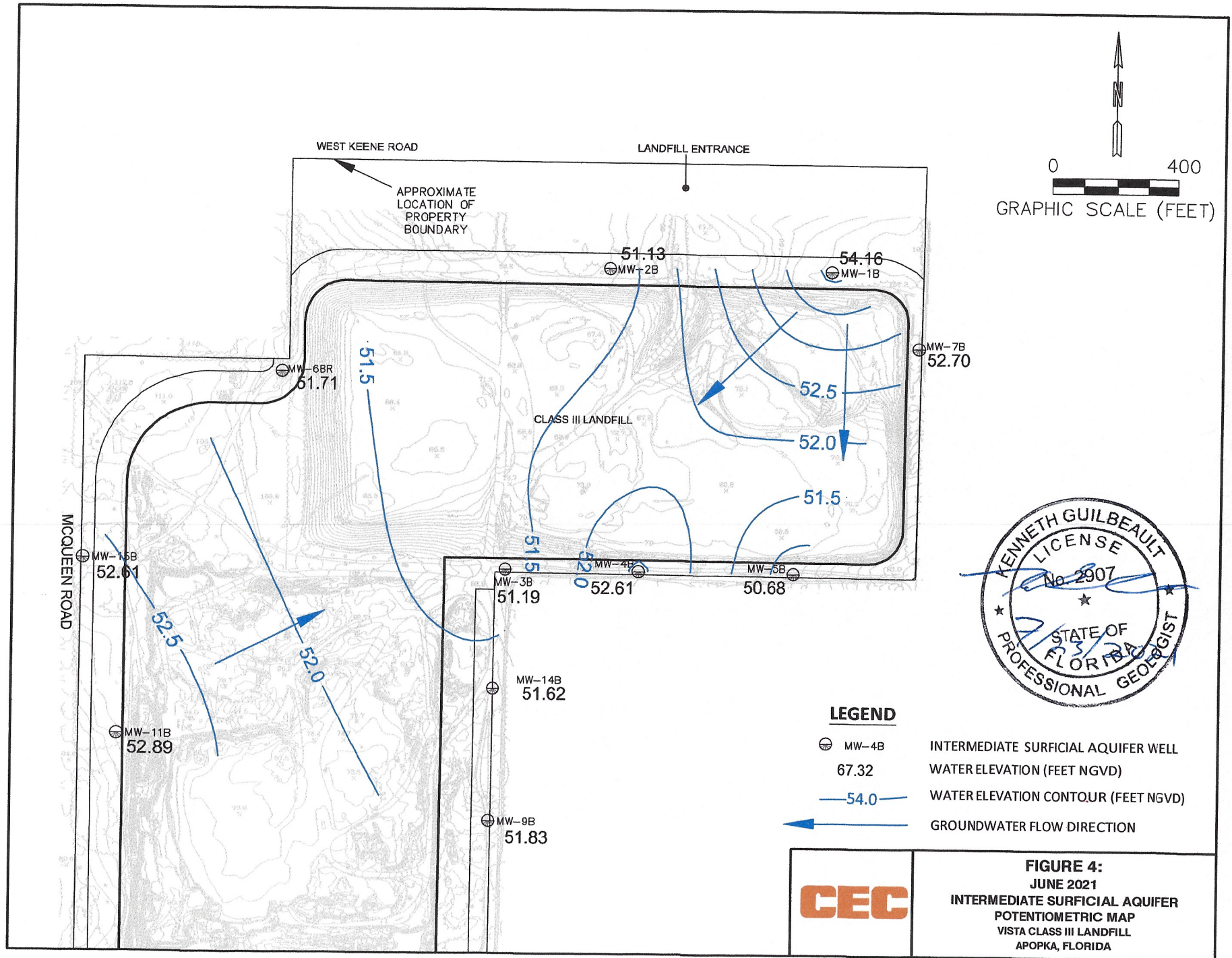
Well No.	TOC Elevation (Feet NGVD)	Depth to Water (Feet Below Top of Casing)	June 7, 2021 Groundwater Elevation (Feet NGVD)
MW-1A	109.47	44.85	64.62
MW-1B	109.53	55.37	54.16
MW-2AR	87.22	34.53	52.69
MW-2B	88.46	37.33	51.13
MW-3A	92.87	41.63	51.24
MW-3B	93.06	41.87	51.19
MW-4A	82.04	30.39	51.65
MW-4B	83.18	30.57	52.61
MW-5A	81.86	28.74	53.12
MW-5B	81.27	30.59	50.68
MW-6AR	104.11	52.40	51.71
MW-6BR	103.99	52.28	51.71
MW-7A	109.26	42.56	66.70
MW-7B	109.13	56.43	52.70
MW-8R	99.60	45.91	53.69
MW-9A	99.45	47.40	52.05
MW-9B	99.52	47.69	51.83
MW-11A	96.35	43.74	52.61
MW-11B	96.37	43.48	52.89
MW-14A	100.62	44.98	55.64
MW-14B	100.10	48.48	51.62
MW-15A	105.27	42.14	63.13
MW-15B	105.15	52.54	52.61
MW-FL1	93.16	41.95	51.21
MW-FL2R	86.76	32.82	53.94
MW-FL3	97.49	46.83	50.66

Notes:

NGVD = National Geodetic Vertical Datum, 1929.

TOC = Top of Casing.





lateral inflow to the shallow surficial aquifer from outside the Site. The flow direction is consistent with previous flow assessments at the Site.

4.2 Intermediate Surficial Aquifer (Lower Zone)

A potentiometric map of the intermediate surficial aquifer was prepared from intermediate surficial well data for the June 2021 sampling event (Figure 4). Groundwater flow within the intermediate surficial aquifer beneath the Site apparently consists of multiple flow regimes, as indicated by the groundwater flow direction arrows on Figure 4. Groundwater entering from the site's western boundary flows east and northeast towards a slight low on the site's northern boundary. A portion of the groundwater enters near the northeast corner of the site and moves to the south and southwest. This groundwater flow configuration is a combination of interchange of groundwater with the overlying shallow surficial aquifer and lateral inflow to the intermediate surficial aquifer from outside the Site. These flow directions are consistent with previous flow assessments at the Site.

4.3 Floridan Aquifer (Deep Zone)

Due to the limited number of "FL" zone wells for the site (MW-FL2R is a deep surficial aquifer monitoring well), potentiometric maps were not prepared. Regional potentiometric maps for the Floridan aquifer indicate that flow in the aquifer at the Site is towards the northeast. This is confirmed by the water levels observed at the Site at Floridan aquifer groundwater monitoring wells MW-FL1 and MW-FL3 (see Table 3).

5 WATER QUALITY MONITORING RESULTS

This section summarizes the results of the groundwater quality sampling for the second semi-annual sampling event performed June 7 and 8, 2021.

5.1 Quality Assurance and Quality Control (QA/QC) Results

ACC field personnel collected one equipment blank during the June 2021 sampling event and submitted the samples with trip blanks in coolers containing volatile organic compound (VOC) samples to Pace for analysis. The samples were received in good condition, properly preserved, and at proper temperatures. The laboratory provided additional QA/QC including analysis of method blanks, surrogates, laboratory control samples/laboratory control sample duplicates (LCS/LCSD), and matrix spike/matrix spike duplicates (MS/MSD). The QA/QC results for the laboratory reports associated with groundwater monitoring points from Pace Report L1362888 are summarized below:

- Low levels of alkalinity were present in the method blank associated with QC batch WG1687935 and WG1688521. Because the concentrations in the method blanks are not present at levels greater than the reporting limit, corrective action is deemed unnecessary.
- Low levels of sodium were present in the method blank associated with QC batches WG1692269. Because the concentrations in the method blanks are not present at levels greater than the reporting limit, corrective action is deemed unnecessary.
- The relative percent difference (RPD) for alkalinity were slightly outside control criteria. Failing RPD indicates inconsistency in the parent sample matrix. All spike recoveries in the MS, MSD, and associated LCS were within acceptable limits, indicating the analytical batch was in control. No further corrective action was needed.
- The RPD associated with batches WG1685068 and WG1686523 for TDS were slightly outside control criteria. Failing RPD indicates inconsistency in the parent sample matrix. The associated LCS were within acceptable limits, indicating the analytical batches were in control. No further corrective action was needed.
- The chloride MS recovery for batch WG1685416 was below control limits at 51.4% (limits 80-120). Recoveries in the LCS and other MS were acceptable, which indicates the analytical batch was in control. No further corrective action was required.
- The vinyl chloride LCS and LCSD recoveries were above control limits at 162% and 155%, respectively, (limits 67-131). This indicates a high bias. Recoveries in the method blank were acceptable, which indicates the analytical batch was in control. Additionally, vinyl chloride was not detected in the groundwater samples. No further corrective action was required.
- The vinyl acetate and trans-1,4-dichloro-2-butene MS recoveries for batch WG1688503 were above control limits at 162% (limits 12-160) and 162% (limits 10-157), respectively. Recoveries in the method blank, LCS, and LCSD were acceptable, which indicates the analytical batch was in control. No further corrective action was required.
- Due to high analyte concentration, several samples were analyzed at a dilution for various analyses. The reporting limits have been adjusted relative to the dilution required.
- Other QA/QC issues were not identified; therefore, the remaining results from the June 2021 event are considered acceptable without qualification.

5.2 Groundwater Quality

The groundwater quality detections and exceedances of the primary or secondary drinking water standards are summarized in Table 4. In accordance with Chapter 62-701, FAC, groundwater results were compared to their respective PDWS or secondary drinking water standard (SDWS) established in Chapter 62-550, FAC and incorporated via reference in Chapter 62-520, FAC. For this routine groundwater monitoring report, groundwater cleanup target levels (GCTLs) in Rule 62-777, FAC, were used for constituents that do not have a PDWS or SDWS to evaluate if a parameter is significantly above background levels. GCTLs are used as a screening for potential anomalies in the concentration data that may require further consideration or review. Appendix A includes the laboratory analytical data and field forms.

5.2.1 Metals Exceedances

Metals with concentrations in excess of applicable groundwater standards in select wells include:

- Iron
- Mercury

These exceedances are discussed below and are listed in Table 4.

5.2.1.1 Iron

The concentration of iron in the groundwater ranged from non-detect to 840 micrograms per liter ($\mu\text{g/L}$) during the June 2021 sampling event. The FDEP SDWS of 300 $\mu\text{g/L}$ for iron was exceeded at MW-7A (367 $\mu\text{g/L}$), MW-9A (840 $\mu\text{g/L}$), and MW-14A (488 $\mu\text{g/L}$). The iron concentrations are not due to landfill operations. Iron will continue to be closely monitored in subsequent sampling events.

5.2.1.2 Mercury

During the June 2021 sampling event, mercury exceeded its PDWS of 2 $\mu\text{g/L}$ in background monitoring well MW-6AR (3.35 $\mu\text{g/L}$). Mercury has been detected in MW-6AR since December 2015.

A previous assessment was conducted during the December 2017 monitoring event to evaluate the source of the mercury detection during that time period. A dissolved methane sample was collected during the December 2017 monitoring event in order to assess if landfill gas was causing the mercury detection. Dissolved methane was not detected in a sample collected during the December 2017 monitoring event. This indicated that the source was not related to landfill gas and since this well was up-gradient from the landfill, the source appeared to be from off-site (possibly the Rapid Infiltration Basins (RIBs) facilities). Mercury analysis will continue to be performed during the next monitoring event.

Table 4. Summary of Groundwater Quality Analytical Results (Detected Parameters Only)
Vista Landfill, June 2021

Parameter	Units	MCL	Standard	MW-1A	MW-2AR	MW-3A	MW-4A	MW-5A	MW-6AR	MW-7A	MW-8R	MW-9A	MW-11A	MW-14A	MW-15A
Well Type				BG	BG	CO	CO	CO	BG	BG	BG	CO	DE	CO	CO
Volatile Organic Compounds															
Acetone	ug/l	NS	NS	1.05 U	1.05 U	1.05 U	1.05 I	1.48 I	1.05 U	1.05 U	1.05 U	1.58 I	1.05 U	1.05 U	1.41 I
Chloroform	ug/l	NS	NS	0.285 I	0.086 U	0.086 U	0.086 U	0.086 U	0.189 I	0.086 U	0.086 U	0.086 U	0.086 U	0.086 U	0.095 I
Styrene	ug/l	100	PDWS	0.117 U	0.117 U	0.322 I	0.117 U	0.117 U	0.117 U	0.185 I	0.117 U	0.238 I	0.117 U	0.117 U	0.117 U
Metals															
Arsenic	ug/l	10	PDWS	0.277 I	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.545 I	1.19 I	0.25 U	1.72 I	0.527 I	0.25 U
Barium	ug/l	2000	PDWS	28.6	10.2	37.1	11.2	72.2	43.2	17.1	23.5	7.98	17.9	9.4	5.08
Chromium	ug/l	100	PDWS	1.4 U	2.57 I	1.4 U	1.4 U	1.7 I	1.4 U	1.4 U	1.4 U	5.93 I	3.88 I	3.24 I	1.4 U
Iron	ug/l	300	SDWS	18.6 I	181	40.7 I	63.9 I	283	14.1 U	367	19.4 I	840	242	488	20.3 I
Mercury	ug/l	2	PDWS	0.049 U	0.049 U	0.049 U	0.049 U	0.0843 I	3.35	0.049 U	0.049 U	0.049 U	0.049 U	0.049 U	0.474
Vanadium	ug/l	NS	NS	2.4 U	2.4 U	2.4 U	3.58 I	2.4 U	2.4 U	2.4 U	2.85 I	4.38 I	3.38 I	2.4 U	2.4 U
Zinc	ug/l	5000	SDWS	5.9 U	5.9 U	7.08 I	147	14.1 I	12 I	13.2 I	8.17 I	8.52 I	5.9 U	7.49 I	5.9 U
General Chemistry															
Alkalinity	mg/l	NS	NS	149	3.29 IV	18 IV	8.78 IV	4.64 IV	16.1 IV	96.3	94	21.9 V	131	16.2 IV	7.35 IV
Chloride	mg/l	250	SDWS	15.6	1.86	4.31	2.11	10.3	46.7	11.9	14.2	4.83	8.5	8.44	7.96
Nitrate (N)	mg/l	10	PDWS	9.1	0.416	0.882	0.593	3.98	6.23	9.59	4.65	0.434	15.1	2	1.13
Residues- Filterable (TDS)	mg/l	500	SDWS	300	21	57	41	61	206	227	159	69	253	65	38
Sodium	mg/l	160	PDWS	7.56	2.24 V	2.93 V	1.66 V	3.3 V	16.1	6.28	6.78	3.2 V	9.92	5.15 V	4.86 V
Thallium	ug/l	2	PDWS	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.532 I	0.19 U	0.19 U
Field Parameters															
Dissolved Oxygen	MG/L	NS	NS	0.6	0.9	1.4	3.5	3.3	2.2	0.6	0.8	1.3	2.5	1.5	2.4
Dissolved Oxygen	% Sat.	<20	MPIS	7.67	11.71	17.57	43.94	41.43	28.12	7.67	10.04	16.03	30.26	18.49	29.59
Oxidation Reduction Potential	mV	NS	NS	52	234	167	183	245	239	85	223	148	98	180	193
pH	S.U.	6.5-8.5	SDWS	7.37	4.99	5.63	5.59	5.16	5.12	7.7	6.63	6.64	7.6	5.81	4.85
Specific Conductance	UMHOS/CM	NS	NS	450	29	82	60	88	302	328	288	82	369	73	63
Temperature, Water	Deg C	NS	NS	28.3	28.7	26.9	27.3	27.2	27.7	27.5	27.4	26.1	25.4	26.1	26.4
Turbidity	NTU	NS	NS	3.3	1.91	3.8	3.2	3.1	0.29	3.8	4.49	4.8	4.7	8.6	3.2

NOTES:

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.)
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.)
3. Groundwater Clean-Up Target Level (62-777 F.A.C.) are used for screening purposes only to evaluate if a parameter is significantly above background levels.
4. MPIS = Monitoring Plan Implementation Schedule
5. NS = No numeric standard has been set for this analyte.
6. mg/L = milligrams per liter
7. ug/L= micrograms per liter
8. NTU = nephelometric turbidity units
9. Yellow shaded values indicate parameter concentrations exceeded respective PDWS or SDWS.
10. Degrees C = Degrees Celcius
11. umhos/cm = micromhos per centimeter
12. % Sat = Percent saturation
13. U = Analyte concentration was below the laboratory detection limit (value shown).
14. I = Analyte concentration was between the laboratory detection limit and laboratory practical.
15. V = Analyte was detected in the sample and an associated method blank.
16. Q = Sample held beyond the accepted holding time.
17. BG= Background well
18. CO = Compliance well
19. Percent saturation of dissolved oxygen calculated from <http://www.fivecreeks.org/monitor/do.html>.
20. --- = Parameter not collected.

5.2.2 Inorganic Parameters Exceedances

Nitrate and dissolved oxygen exceeded their applicable standards at specific wells. Additionally, the pH concentrations at some monitoring wells fell outside the SDWS range for pH. These parameters are discussed below.

5.2.2.1 Nitrate

The FDEP PDWS of 10 milligrams per liter (mg/L) for nitrate was exceeded at detection well MW-11A (15.1 mg/L). These results were consistent with recent nitrate values obtained from this well.

No exceedances of nitrate occurred at other monitoring wells. Traditional leachate indicator parameters at MW-11A have remained relatively steady which indicates the nitrate is likely from a source other than the landfill. This well is located cross gradient to the landfill. Nitrate at MW-11A will continue to be closely monitored in subsequent sampling events.

5.2.2.2 Dissolved Oxygen

Dissolved oxygen values (calculated from field measurements) were above the Site's MPIS limit of not greater than 20 percent oxygen saturation in monitoring wells MW-4A (43.94%), MW-5A (41.43%), MW-6AR (28.12%), MW-11A (30.26%), and MW-15A (29.59%).

The monitoring wells were purged and sampled with a bladder pump at low flow rates as indicated by their relative gallons per minute (gpm) pumping rates as follows: MW-4A (0.21 gpm), MW-5A (0.20 gpm), MW-6AR (0.20 gpm), MW-11A (0.20 gpm), and MW-15A (0.25 gpm). During the stabilization readings, the dissolved oxygen concentrations remained relatively steady. These measurements were collected using low flow techniques and are considered to be a natural characteristic of the aquifer system at these wells.

5.2.2.3 pH

The pH was below the SDWS range of 6.5 to 8.5 units in background monitoring wells MW-2AR (4.99 units) and MW-6AR (5.12 units) and in compliance wells MW-3A (5.63 units), MW-4A (5.59 units), MW-5A (5.16 units), MW-14A (5.81 units), and MW-15A (4.85 units). Low groundwater pH in this region is the result of low pH in precipitation, rapid recharge, and little buffering capacity of the surficial sands. The pH levels observed at the Site are characteristic of the groundwater in this region of Florida.

5.2.3 Organic Parameters Exceedances

There were no exceedances of organic parameters during the June 2021 monitoring event.

There were low level volatile organic compound (VOC) detections of acetone, chloroform, and styrene (see Table 4). These compounds will continue to be monitored to confirm that concentrations remain below their respective regulatory standards.

6 SUMMARY

This section summarizes the June 2021 semi-annual findings based on the groundwater sampling results.

6.1 Groundwater Sampling Results

The groundwater flow assessment shows the following:

- Shallow surficial aquifer groundwater in the vicinity of the site flows primarily toward the southwest corner of the landfill.
- Groundwater flow direction in the intermediate surficial aquifer is variable with groundwater flowing into the site from the northeast corner and flowing to the south and southwest.
- In the intermediate surficial aquifer, the groundwater also flows into the site from the southern and western boundaries flowing to the northern boundary and southeast corner of the site.
- Regional potentiometric maps for the Floridan aquifer indicate that flow is towards the northeast and is confirmed by the data from the Floridan aquifer monitoring wells.

The analytical results from analysis of the groundwater samples shows the following:

- There were no verified landfill impacts during the June 2021 monitoring event.
- Nitrate exceeded its PDWS in background monitoring wells MW-11A. The nitrate levels are attributed to background conditions, possibly associated with local RIBs facilities.
- Iron exceeded its SDWS in background monitoring well MW-7A and compliance wells MW-9A and MW-14A.
- Mercury exceeded its PDWS in background monitoring well MW-6AR. The mercury concentration is from an off-site source (possibly associated with local RIBs facilities) and not related to landfill operations.
- Dissolved oxygen values (field measurement) were above the Site's MPIS limit of not greater than 20% oxygen saturation in the groundwater monitoring wells MW-4A, MW-5A, MW-6AR, MW-11A, and MW-15A. These measurements were collected using low flow techniques and are considered to be a natural characteristic of the aquifer system at these wells.
- Field pH levels fell outside the SDWS range for pH at select monitoring wells. The low pH levels in select monitoring wells are attributed to Florida's ambient groundwater quality characteristics due to low pH rainfall, rapid recharge, and the limited buffering capability of Florida's sandy soils.

Detection monitoring should continue as outlined in the MPIS.

APPENDIX A
LABORATORY ANALYTICAL RESULTS
AND FIELD FORMS

Vista

Sample Delivery Group: L1362888
Samples Received: 06/08/2021
Project Number: 200
Description: Vista-Semiannual GW Parameters June Dec
Site: FL26
Report To: Sheree Grant
4978 LB McLeod Road
Orlando, FL 32811

Entire Report Reviewed By:



Stacy Kennedy
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

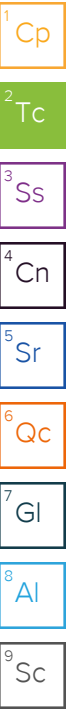
Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

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SAMPLE SUMMARY

MW-1A L1362888-01 GW

Collected by
Danny Armour

Collected date/time
06/07/21 13:21

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685398	1	06/09/21 10:30	06/09/21 15:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 17:11	06/08/21 17:11	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:23	06/23/21 14:23	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 15:47	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:21	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 16:45	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 01:09	06/14/21 01:09	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 00:47	06/17/21 00:47	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 20:59	HMH	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-3A L1362888-02 GW

Collected by
Danny Armour

Collected date/time
06/07/21 10:14

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685398	1	06/09/21 10:30	06/09/21 15:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 17:27	06/08/21 17:27	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:28	06/23/21 14:28	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 15:49	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:24	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 16:49	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 01:28	06/14/21 01:28	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 01:07	06/17/21 01:07	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 21:47	HMH	Mt. Juliet, TN

MW-4A L1362888-03 GW

Collected by
Danny Armour

Collected date/time
06/07/21 10:52

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685398	1	06/09/21 10:30	06/09/21 15:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 18:17	06/08/21 18:17	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:31	06/23/21 14:31	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 15:51	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:27	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 16:53	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 01:48	06/14/21 01:48	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 01:27	06/17/21 01:27	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 18:58	HMH	Mt. Juliet, TN

MW-5A L1362888-04 GW

Collected by
Danny Armour

Collected date/time
06/07/21 11:37

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685398	1	06/09/21 10:30	06/09/21 15:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 18:33	06/08/21 18:33	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:33	06/23/21 14:33	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 15:53	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:30	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 16:57	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 02:07	06/14/21 02:07	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 01:48	06/17/21 01:48	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 21:59	HMH	Mt. Juliet, TN

SAMPLE SUMMARY

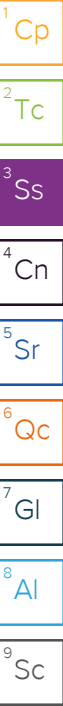
MW-7A L1362888-05 GW

Collected by
Danny Armour

Collected date/time
06/07/21 12:25

Received date/time
06/08/21 09:00

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Gravimetric Analysis by Method 2540 C-2011	WG1685398	1	06/09/21 10:30	06/09/21 15:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 19:22	06/08/21 19:22	ELN	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	5	06/09/21 09:23	06/09/21 09:23	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:34	06/23/21 14:34	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 15:55	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:37	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 17:11	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 02:26	06/14/21 02:26	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 02:43	06/17/21 02:43	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 22:11	HMH	Mt. Juliet, TN



MW-9A L1362888-06 GW

Collected by
Danny Armour

Collected date/time
06/07/21 09:06

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685068	1	06/08/21 18:20	06/08/21 19:35	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 19:39	06/08/21 19:39	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:41	06/23/21 14:41	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 15:57	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:40	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 17:15	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 02:45	06/14/21 02:45	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 03:04	06/17/21 03:04	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 22:23	HMH	Mt. Juliet, TN

MW-11A L1362888-07 GW

Collected by
Danny Armour

Collected date/time
06/07/21 08:32

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685398	1	06/09/21 10:30	06/09/21 15:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 19:55	06/08/21 19:55	ELN	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	5	06/08/21 20:11	06/08/21 20:11	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:43	06/23/21 14:43	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 15:59	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:43	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 17:18	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 03:04	06/14/21 03:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 03:24	06/17/21 03:24	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 22:35	HMH	Mt. Juliet, TN

MW-14A L1362888-08 GW

Collected by
Danny Armour

Collected date/time
06/07/21 09:40

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685068	1	06/08/21 18:20	06/08/21 19:35	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 20:28	06/08/21 20:28	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:44	06/23/21 14:44	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 16:01	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:46	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 17:22	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 03:23	06/14/21 03:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 03:44	06/17/21 03:44	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 22:47	HMH	Mt. Juliet, TN

ACCOUNT:

Vista

PROJECT:

200

SDG:

L1362888

DATE/TIME:

06/29/21 11:37

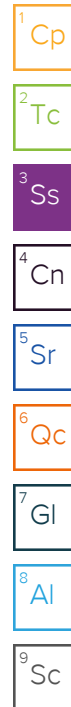
PAGE:

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SAMPLE SUMMARY

MW-15A L1362888-09 GW

				Collected by Danny Armour	Collected date/time 06/07/21 07:59	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1685398	1	06/09/21 10:30	06/09/21 15:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1684598	1	06/08/21 20:44	06/08/21 20:44	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:46	06/23/21 14:46	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685209	1	06/09/21 10:08	06/09/21 16:03	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:48	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692178	1	06/21/21 11:29	06/21/21 17:25	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/14/21 03:42	06/14/21 03:42	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 04:05	06/17/21 04:05	ADM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 23:20	HMH	Mt. Juliet, TN



TRIP BLANK L1362888-10 GW

				Collected by Danny Armour	Collected date/time 06/07/21 00:00	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1687409	1	06/13/21 21:40	06/13/21 21:40	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1689128	1	06/17/21 04:25	06/17/21 04:25	ADM	Mt. Juliet, TN

MW-1A L1362888-11 GW

				Collected by Danny Armour	Collected date/time 06/07/21 13:21	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 07:46	06/14/21 07:46	AMH	Mt. Juliet, TN

MW-3A L1362888-12 GW

				Collected by Danny Armour	Collected date/time 06/07/21 10:14	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 07:53	06/14/21 07:53	AMH	Mt. Juliet, TN

MW-4A L1362888-13 GW

				Collected by Danny Armour	Collected date/time 06/07/21 10:52	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 08:01	06/14/21 08:01	AMH	Mt. Juliet, TN

MW-5A L1362888-14 GW

				Collected by Danny Armour	Collected date/time 06/07/21 11:37	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 08:09	06/14/21 08:09	AMH	Mt. Juliet, TN

MW-7A L1362888-15 GW

				Collected by Danny Armour	Collected date/time 06/07/21 12:25	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 08:16	06/14/21 08:16	AMH	Mt. Juliet, TN

SAMPLE SUMMARY

MW-9A L1362888-16 GW

				Collected by Danny Armour	Collected date/time 06/07/21 09:06	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 08:25	06/14/21 08:25	AMH	Mt. Juliet, TN

MW-11A L1362888-17 GW

				Collected by Danny Armour	Collected date/time 06/07/21 08:32	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 08:33	06/14/21 08:33	AMH	Mt. Juliet, TN

MW-14A L1362888-18 GW

				Collected by Danny Armour	Collected date/time 06/07/21 09:40	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 08:54	06/14/21 08:54	AMH	Mt. Juliet, TN

MW-15A L1362888-19 GW

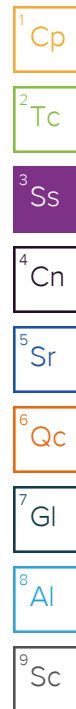
				Collected by Danny Armour	Collected date/time 06/07/21 07:59	Received date/time 06/08/21 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1687935	1	06/14/21 09:05	06/14/21 09:05	AMH	Mt. Juliet, TN

MW-2AR L1362888-20 GW

				Collected by Danny Armour	Collected date/time 06/08/21 08:10	Received date/time 06/09/21 10:15
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1686523	1	06/10/21 18:58	06/10/21 20:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1685416	1	06/09/21 15:31	06/09/21 15:31	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:48	06/23/21 14:48	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685935	1	06/14/21 15:19	06/16/21 18:41	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:51	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692266	1	06/23/21 22:30	06/24/21 16:40	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1688503	1	06/15/21 11:59	06/15/21 11:59	BMB	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 23:32	HMH	Mt. Juliet, TN

MW-6AR L1362888-21 GW

				Collected by Danny Armour	Collected date/time 06/08/21 09:12	Received date/time 06/09/21 10:15
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1686523	1	06/10/21 18:58	06/10/21 20:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1685416	1	06/09/21 16:03	06/09/21 16:03	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:49	06/23/21 14:49	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685935	1	06/14/21 15:19	06/16/21 18:53	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:54	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692266	1	06/23/21 22:30	06/24/21 16:43	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1688503	1	06/15/21 12:20	06/15/21 12:20	BMB	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 23:44	HMH	Mt. Juliet, TN



SAMPLE SUMMARY

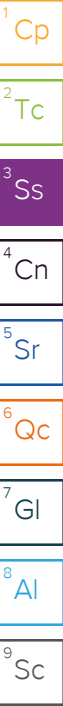
MW-8R L1362888-22 GW

Collected by
Danny Armour

Collected date/time
06/08/21 07:20

Received date/time
06/09/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1686523	1	06/10/21 18:58	06/10/21 20:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1685416	1	06/09/21 16:52	06/09/21 16:52	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:53	06/23/21 14:53	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685935	1	06/14/21 15:19	06/16/21 18:55	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:56	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692266	1	06/23/21 22:30	06/24/21 16:47	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1688503	1	06/15/21 12:41	06/15/21 12:41	BMB	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686010	1	06/10/21 10:38	06/11/21 23:56	HMH	Mt. Juliet, TN



TRIP BLANK 2 L1362888-23 GW

Collected by
Danny Armour

Collected date/time
06/08/21 00:00

Received date/time
06/08/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1688518	1	06/15/21 00:59	06/15/21 00:59	JHH	Mt. Juliet, TN

Equipment Blank L1362888-24 GW

Collected by
Danny Armour

Collected date/time
06/08/21 08:30

Received date/time
06/09/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1686523	1	06/10/21 18:58	06/10/21 20:04	MMF	Mt. Juliet, TN
Wet Chemistry by Method 300.0	WG1685416	1	06/09/21 17:09	06/09/21 17:09	ELN	Mt. Juliet, TN
Wet Chemistry by Method 350.1	WG1692603	1	06/23/21 14:56	06/23/21 14:56	SL	Mt. Juliet, TN
Mercury by Method 7470A	WG1685935	1	06/14/21 15:19	06/16/21 18:58	BMF	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1692269	1	06/22/21 05:41	06/23/21 05:59	EL	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1692266	1	06/23/21 22:30	06/24/21 16:50	LD	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG1686742	1	06/11/21 08:46	06/12/21 12:12	HMH	Mt. Juliet, TN

MW-2AR L1362888-25 GW

Collected by
Danny Armour

Collected date/time
06/08/21 08:10

Received date/time
06/09/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1688521	1	06/15/21 01:26	06/15/21 01:26	ARD	Mt. Juliet, TN

MW-6AR L1362888-26 GW

Collected by
Danny Armour

Collected date/time
06/08/21 09:12

Received date/time
06/09/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1688521	1	06/15/21 01:35	06/15/21 01:35	ARD	Mt. Juliet, TN

MW-8R L1362888-27 GW

Collected by
Danny Armour

Collected date/time
06/08/21 07:20

Received date/time
06/09/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1688521	1	06/15/21 01:42	06/15/21 01:42	ARD	Mt. Juliet, TN

SAMPLE SUMMARY

Equipment Blank L1362888-28 GW

Collected by
Danny Armour

Collected date/time
06/08/21 08:30

Received date/time
06/09/21 10:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1688521	1	06/15/21 01:51	06/15/21 01:51	ARD	Mt. Juliet, TN

¹Cp ${}^2\text{Tc}$ 3S_1 ${}^4\text{Cn}$ ^5Sr ${}^6\text{Qc}$ ${}^7\text{Gf}$ ${}^8\text{Al}$ ${}^9\text{Sc}$

CASE NARRATIVE

Unless qualified or notated within the narrative below, all sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Stacy Kennedy
Project Manager

Wet Chemistry by Method 2320 B-2011

Indicates the analyte was detected in both the sample and method blank.

Batch	Analyte	Lab Sample ID
WG1687935	Total Alkalinity	L1362888-12, 13, 14, 16, 18, 19
WG1688521	Total Alkalinity	L1362888-25, 26, 28

The value is outside laboratory established criteria.

Batch	Lab Sample ID	Analytes
WG1688521	(DUP) R3667293-4	Alkalinity

Gravimetric Analysis by Method 2540 C-2011

The value is outside laboratory established criteria.

Batch	Lab Sample ID	Analytes
WG1685068	(DUP) R3665841-4	Dissolved Solids
WG1686523	(DUP) R3667094-3, (DUP) R3667094-4	Dissolved Solids

Wet Chemistry by Method 300.0

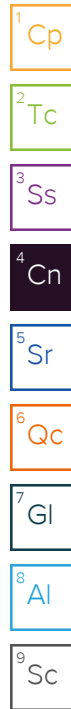
The value is outside laboratory established criteria.

Batch	Lab Sample ID	Analytes
WG1685416	(MS) R3665466-7	Chloride

Metals (ICP) by Method 6010B

Indicates the analyte was detected in both the sample and method blank.

Batch	Analyte	Lab Sample ID
WG1692269	Sodium, Total Recoverable	L1362888-02, 03, 04, 06, 08, 09, 20, 24



CASE NARRATIVE

Volatile Organic Compounds (GC/MS) by Method 8260B

The value is outside laboratory established criteria.

Batch	Lab Sample ID	Analytes
WG1687409	(LCS) R3667596-1, (LCSD) R3667596-2, L1362888-01, 02, 03, 04, 05, 06, 07, 08, 09, 10	Vinyl chloride

The value is outside laboratory established criteria.

Batch	Lab Sample ID	Analytes
WG1688503	(LCSD) R3668780-2, L1362888-20, 21, 22	Vinyl acetate
WG1689128	(LCSD) R3668385-2, L1362888-01, 02, 03, 04, 05, 06, 07, 08, 09, 10	trans-1,4-Dichloro-2-butene

The value is outside laboratory established criteria.

Batch	Lab Sample ID	Analytes
WG1688503	(MS) R3668780-4	trans-1,4-Dichloro-2-butene and Vinyl acetate

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	64.62	ft
pH (On Site)	7.37	su
Temperature (on-site)	28.3	Deg. C
Specific Conductance (on site)	450	umhos/cm
Dissolved Oxygen (on-site)	.6	mg/l
Turbidity (on-site)	3.3	NTU
eH/ORP (On Site)	52	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	300		10.0	1	06/09/2021 15:04	WG1685398

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15.6		0.0519	1.00	1	06/08/2021 17:11	WG1684598
Nitrate as (N)	9.10		0.0227	0.100	1	06/08/2021 17:11	WG1684598

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100	1	06/23/2021 14:23	WG1692269

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0490	<u>U</u>	0.0490	0.200	1	06/09/2021 15:47	WG1685209

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	7.56		0.0111	1.00	1	06/23/2021 05:21	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	<u>U</u>	2.80	5.00	1	06/23/2021 05:21	WG1692269
Barium, Total Recoverable	28.6		1.70	5.00	1	06/23/2021 05:21	WG1692269
Cadmium, Total Recoverable	0.700	<u>U</u>	0.700	2.00	1	06/23/2021 05:21	WG1692269
Cobalt, Total Recoverable	2.30	<u>U</u>	2.30	10.0	1	06/23/2021 05:21	WG1692269
Chromium, Total Recoverable	1.40	<u>U</u>	1.40	10.0	1	06/23/2021 05:21	WG1692269
Copper, Total Recoverable	5.30	<u>U</u>	5.30	10.0	1	06/23/2021 05:21	WG1692269
Iron, Total Recoverable	18.6	<u>I</u>	14.1	100	1	06/23/2021 05:21	WG1692269
Nickel, Total Recoverable	4.90	<u>U</u>	4.90	10.0	1	06/23/2021 05:21	WG1692269
Lead, Total Recoverable	1.90	<u>U</u>	1.90	5.00	1	06/23/2021 05:21	WG1692269
Selenium, Total Recoverable	7.40	<u>U</u>	7.40	10.0	1	06/23/2021 05:21	WG1692269
Vanadium, Total Recoverable	2.40	<u>U</u>	2.40	20.0	1	06/23/2021 05:21	WG1692269
Zinc, Total Recoverable	5.90	<u>U</u>	5.90	50.0	1	06/23/2021 05:21	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.277	1	0.250	2.00	1	06/21/2021 16:45	WG1692178
Beryllium, Total Recoverable	0.120	1	0.120	2.00	1	06/21/2021 16:45	WG1692178
Antimony, Total Recoverable	0.754	1	0.754	2.00	1	06/21/2021 16:45	WG1692178
Thallium, Total Recoverable	0.190	1	0.190	2.00	1	06/21/2021 16:45	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	1	0.120	0.500	1	06/14/2021 01:09	WG1687409
1,1,1-Trichloroethane	0.0940	1	0.0940	0.500	1	06/14/2021 01:09	WG1687409
1,1,2,2-Tetrachloroethane	0.130	1	0.130	0.500	1	06/14/2021 01:09	WG1687409
1,1,2-Trichloroethane	0.0940	1	0.0940	0.500	1	06/14/2021 01:09	WG1687409
1,1-Dichloroethane	0.114	1	0.114	0.500	1	06/14/2021 01:09	WG1687409
1,1-Dichloroethene	0.188	1	0.188	0.500	1	06/14/2021 01:09	WG1687409
1,2,3-Trichloropropane	0.247	1	0.247	2.50	1	06/14/2021 01:09	WG1687409
1,2-Dichlorobenzene	0.101	1	0.101	0.500	1	06/14/2021 01:09	WG1687409
1,2-Dichloroethane	0.108	1	0.108	0.500	1	06/14/2021 01:09	WG1687409
1,2-Dichloropropane	0.190	1	0.190	0.500	1	06/14/2021 01:09	WG1687409
1,4-Dichlorobenzene	0.121	1	0.121	0.500	1	06/14/2021 01:09	WG1687409
2-Butanone (MEK)	1.28	1	1.28	5.00	1	06/14/2021 01:09	WG1687409
2-Hexanone	0.757	1	0.757	5.00	1	06/14/2021 01:09	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	1	0.823	5.00	1	06/14/2021 01:09	WG1687409
Acetone	1.05	1	1.05	25.0	1	06/17/2021 00:47	WG1689128
Acrylonitrile	0.873	1	0.873	5.00	1	06/14/2021 01:09	WG1687409
Benzene	0.0896	1	0.0896	0.500	1	06/14/2021 01:09	WG1687409
Bromochloromethane	0.145	1	0.145	0.500	1	06/14/2021 01:09	WG1687409
Bromodichloromethane	0.0800	1	0.0800	0.500	1	06/14/2021 01:09	WG1687409
Bromoform	0.186	1	0.186	0.500	1	06/14/2021 01:09	WG1687409
Bromomethane	0.157	1	0.157	2.50	1	06/14/2021 01:09	WG1687409
Carbon disulfide	0.101	1	0.101	0.500	1	06/14/2021 01:09	WG1687409
Carbon tetrachloride	0.159	1	0.159	0.500	1	06/14/2021 01:09	WG1687409
Chlorobenzene	0.140	1	0.140	0.500	1	06/14/2021 01:09	WG1687409
Chloroethane	0.141	1	0.141	2.50	1	06/14/2021 01:09	WG1687409
Chloroform	0.285	1	0.0860	0.500	1	06/14/2021 01:09	WG1687409
Chloromethane	0.153	1	0.153	1.25	1	06/14/2021 01:09	WG1687409
Dibromochloromethane	0.128	1	0.128	0.500	1	06/14/2021 01:09	WG1687409
Dibromomethane	0.117	1	0.117	0.500	1	06/14/2021 01:09	WG1687409
Ethylbenzene	0.158	1	0.158	0.500	1	06/14/2021 01:09	WG1687409
Iodomethane	0.377	1	0.377	10.0	1	06/14/2021 01:09	WG1687409
Methylene Chloride	1.07	1	1.07	2.50	1	06/14/2021 01:09	WG1687409
Styrene	0.117	1	0.117	0.500	1	06/14/2021 01:09	WG1687409
Tetrachloroethene	0.199	1	0.199	0.500	1	06/17/2021 00:47	WG1689128
Toluene	0.412	1	0.412	0.500	1	06/14/2021 01:09	WG1687409
Trichloroethene	0.153	1	0.153	0.500	1	06/14/2021 01:09	WG1687409
Trichlorofluoromethane	0.130	1	0.130	2.50	1	06/14/2021 01:09	WG1687409
Vinyl acetate	0.645	1	0.645	5.00	1	06/14/2021 01:09	WG1687409
Vinyl chloride	0.118	1	0.118	0.500	1	06/14/2021 01:09	WG1687409
Xylenes, Total	0.316	1	0.316	1.50	1	06/14/2021 01:09	WG1687409
cis-1,2-Dichloroethene	0.0933	1	0.0933	0.500	1	06/14/2021 01:09	WG1687409
cis-1,3-Dichloropropene	0.0976	1	0.0976	0.500	1	06/14/2021 01:09	WG1687409
trans-1,2-Dichloroethene	0.152	1	0.152	0.500	1	06/14/2021 01:09	WG1687409
trans-1,3-Dichloropropene	0.222	1	0.222	0.500	1	06/14/2021 01:09	WG1687409
trans-1,4-Dichloro-2-butene	0.257	1	0.257	5.00	1	06/17/2021 00:47	WG1689128
(S) 4-Bromofluorobenzene	100			77.0-126		06/14/2021 01:09	WG1687409
(S) 4-Bromofluorobenzene	83.8			77.0-126		06/17/2021 00:47	WG1689128
(S) Toluene-d8	103			80.0-120		06/14/2021 01:09	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	103			80.0-120		06/17/2021 00:47	WG1689128
(S) 1,2-Dichloroethane-d4	99.9			70.0-130		06/14/2021 01:09	WG1687409
(S) 1,2-Dichloroethane-d4	117			70.0-130		06/17/2021 00:47	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 20:59	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 20:59	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	51.24	ft
pH (On Site)	5.63	su
Temperature (on-site)	26.9	Deg. C
Specific Conductance (on site)	82	umhos/cm
Dissolved Oxygen (on-site)	1.4	mg/l
Turbidity (on-site)	3.8	NTU
eH/ORP (On Site)	167	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	57.0		10.0	1	06/09/2021 15:04	WG1685398

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	4.31		0.0519	1.00	1	06/08/2021 17:27	WG1684598
Nitrate as (N)	0.882		0.0227	0.100	1	06/08/2021 17:27	WG1684598

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100	1	06/23/2021 14:28	WG1692269

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0490	<u>U</u>	0.0490	0.200	1	06/09/2021 15:49	WG1685209

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	2.93	<u>V</u>	0.0111	1.00	1	06/23/2021 05:24	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	<u>U</u>	2.80	5.00	1	06/23/2021 05:24	WG1692269
Barium, Total Recoverable	37.1		1.70	5.00	1	06/23/2021 05:24	WG1692269
Cadmium, Total Recoverable	0.700	<u>U</u>	0.700	2.00	1	06/23/2021 05:24	WG1692269
Cobalt, Total Recoverable	2.30	<u>U</u>	2.30	10.0	1	06/23/2021 05:24	WG1692269
Chromium, Total Recoverable	1.40	<u>U</u>	1.40	10.0	1	06/23/2021 05:24	WG1692269
Copper, Total Recoverable	5.30	<u>U</u>	5.30	10.0	1	06/23/2021 05:24	WG1692269
Iron, Total Recoverable	40.7	<u>I</u>	14.1	100	1	06/23/2021 05:24	WG1692269
Nickel, Total Recoverable	4.90	<u>U</u>	4.90	10.0	1	06/23/2021 05:24	WG1692269
Lead, Total Recoverable	1.90	<u>U</u>	1.90	5.00	1	06/23/2021 05:24	WG1692269
Selenium, Total Recoverable	7.40	<u>U</u>	7.40	10.0	1	06/23/2021 05:24	WG1692269
Vanadium, Total Recoverable	2.40	<u>U</u>	2.40	20.0	1	06/23/2021 05:24	WG1692269
Zinc, Total Recoverable	7.08	<u>I</u>	5.90	50.0	1	06/23/2021 05:24	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	J	0.250	2.00	1	06/21/2021 16:49	WG1692178
Beryllium, Total Recoverable	0.120	J	0.120	2.00	1	06/21/2021 16:49	WG1692178
Antimony, Total Recoverable	0.754	J	0.754	2.00	1	06/21/2021 16:49	WG1692178
Thallium, Total Recoverable	0.190	J	0.190	2.00	1	06/21/2021 16:49	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	J	0.120	0.500	1	06/14/2021 01:28	WG1687409
1,1,1-Trichloroethane	0.0940	J	0.0940	0.500	1	06/14/2021 01:28	WG1687409
1,1,2,2-Tetrachloroethane	0.130	J	0.130	0.500	1	06/14/2021 01:28	WG1687409
1,1,2-Trichloroethane	0.0940	J	0.0940	0.500	1	06/14/2021 01:28	WG1687409
1,1-Dichloroethane	0.114	J	0.114	0.500	1	06/14/2021 01:28	WG1687409
1,1-Dichloroethene	0.188	J	0.188	0.500	1	06/14/2021 01:28	WG1687409
1,2,3-Trichloropropane	0.247	J	0.247	2.50	1	06/14/2021 01:28	WG1687409
1,2-Dichlorobenzene	0.101	J	0.101	0.500	1	06/14/2021 01:28	WG1687409
1,2-Dichloroethane	0.108	J	0.108	0.500	1	06/14/2021 01:28	WG1687409
1,2-Dichloropropane	0.190	J	0.190	0.500	1	06/14/2021 01:28	WG1687409
1,4-Dichlorobenzene	0.121	J	0.121	0.500	1	06/14/2021 01:28	WG1687409
2-Butanone (MEK)	1.28	J	1.28	5.00	1	06/14/2021 01:28	WG1687409
2-Hexanone	0.757	J	0.757	5.00	1	06/14/2021 01:28	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	J	0.823	5.00	1	06/14/2021 01:28	WG1687409
Acetone	1.05	J	1.05	25.0	1	06/17/2021 01:07	WG1689128
Acrylonitrile	0.873	J	0.873	5.00	1	06/14/2021 01:28	WG1687409
Benzene	0.0896	J	0.0896	0.500	1	06/14/2021 01:28	WG1687409
Bromochloromethane	0.145	J	0.145	0.500	1	06/14/2021 01:28	WG1687409
Bromodichloromethane	0.0800	J	0.0800	0.500	1	06/14/2021 01:28	WG1687409
Bromoform	0.186	J	0.186	0.500	1	06/14/2021 01:28	WG1687409
Bromomethane	0.157	J	0.157	2.50	1	06/14/2021 01:28	WG1687409
Carbon disulfide	0.101	J	0.101	0.500	1	06/14/2021 01:28	WG1687409
Carbon tetrachloride	0.159	J	0.159	0.500	1	06/14/2021 01:28	WG1687409
Chlorobenzene	0.140	J	0.140	0.500	1	06/14/2021 01:28	WG1687409
Chloroethane	0.141	J	0.141	2.50	1	06/14/2021 01:28	WG1687409
Chloroform	0.0860	J	0.0860	0.500	1	06/14/2021 01:28	WG1687409
Chloromethane	0.153	J	0.153	1.25	1	06/14/2021 01:28	WG1687409
Dibromochloromethane	0.128	J	0.128	0.500	1	06/14/2021 01:28	WG1687409
Dibromomethane	0.117	J	0.117	0.500	1	06/14/2021 01:28	WG1687409
Ethylbenzene	0.158	J	0.158	0.500	1	06/14/2021 01:28	WG1687409
Iodomethane	0.377	J	0.377	10.0	1	06/14/2021 01:28	WG1687409
Methylene Chloride	1.07	J	1.07	2.50	1	06/14/2021 01:28	WG1687409
Styrene	0.322	-	0.117	0.500	1	06/14/2021 01:28	WG1687409
Tetrachloroethene	0.199	J	0.199	0.500	1	06/14/2021 01:28	WG1687409
Toluene	0.412	J	0.412	0.500	1	06/14/2021 01:28	WG1687409
Trichloroethene	0.153	J	0.153	0.500	1	06/14/2021 01:28	WG1687409
Trichlorofluoromethane	0.130	J	0.130	2.50	1	06/14/2021 01:28	WG1687409
Vinyl acetate	0.645	J	0.645	5.00	1	06/14/2021 01:28	WG1687409
Vinyl chloride	0.118	J	0.118	0.500	1	06/14/2021 01:28	WG1687409
Xylenes, Total	0.316	J	0.316	1.50	1	06/14/2021 01:28	WG1687409
cis-1,2-Dichloroethene	0.0933	J	0.0933	0.500	1	06/14/2021 01:28	WG1687409
cis-1,3-Dichloropropene	0.0976	J	0.0976	0.500	1	06/14/2021 01:28	WG1687409
trans-1,2-Dichloroethene	0.152	J	0.152	0.500	1	06/14/2021 01:28	WG1687409
trans-1,3-Dichloropropene	0.222	J	0.222	0.500	1	06/14/2021 01:28	WG1687409
trans-1,4-Dichloro-2-butene	0.257	J	0.257	5.00	1	06/17/2021 01:07	WG1689128
(S) 4-Bromofluorobenzene	103			77.0-126		06/14/2021 01:28	WG1687409
(S) 4-Bromofluorobenzene	87.5			77.0-126		06/17/2021 01:07	WG1689128
(S) Toluene-d8	105			80.0-120		06/14/2021 01:28	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	107			80.0-120		06/17/2021 01:07	WG1689128
(S) 1,2-Dichloroethane-d4	101			70.0-130		06/14/2021 01:28	WG1687409
(S) 1,2-Dichloroethane-d4	116			70.0-130		06/17/2021 01:07	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 21:47	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 21:47	WG1686010

1
Cp2
Tc3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	51.65	ft
pH (On Site)	5.59	su
Temperature (on-site)	27.3	Deg. C
Specific Conductance (on site)	60	umhos/cm
Dissolved Oxygen (on-site)	3.5	mg/l
Turbidity (on-site)	3.2	NTU
eH/ORP (On Site)	183	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	41.0		10.0	1	06/09/2021 15:04	WG1685398

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	2.11		0.0519	1.00	1	06/08/2021 18:17	WG1684598
Nitrate as (N)	0.593		0.0227	0.100	1	06/08/2021 18:17	WG1684598

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100	1	06/23/2021 14:31	WG1692269

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0490	<u>U</u>	0.0490	0.200	1	06/09/2021 15:51	WG1685209

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	1.66	<u>V</u>	0.0111	1.00	1	06/23/2021 05:27	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	<u>U</u>	2.80	5.00	1	06/23/2021 05:27	WG1692269
Barium, Total Recoverable	11.2		1.70	5.00	1	06/23/2021 05:27	WG1692269
Cadmium, Total Recoverable	0.700	<u>U</u>	0.700	2.00	1	06/23/2021 05:27	WG1692269
Cobalt, Total Recoverable	2.30	<u>U</u>	2.30	10.0	1	06/23/2021 05:27	WG1692269
Chromium, Total Recoverable	1.40	<u>U</u>	1.40	10.0	1	06/23/2021 05:27	WG1692269
Copper, Total Recoverable	5.30	<u>U</u>	5.30	10.0	1	06/23/2021 05:27	WG1692269
Iron, Total Recoverable	63.9	<u>I</u>	14.1	100	1	06/23/2021 05:27	WG1692269
Nickel, Total Recoverable	4.90	<u>U</u>	4.90	10.0	1	06/23/2021 05:27	WG1692269
Lead, Total Recoverable	1.90	<u>U</u>	1.90	5.00	1	06/23/2021 05:27	WG1692269
Selenium, Total Recoverable	7.40	<u>U</u>	7.40	10.0	1	06/23/2021 05:27	WG1692269
Vanadium, Total Recoverable	3.58	<u>I</u>	2.40	20.0	1	06/23/2021 05:27	WG1692269
Zinc, Total Recoverable	147		5.90	50.0	1	06/23/2021 05:27	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	CC	0.250	2.00	1	06/21/2021 16:53	WG1692178
Beryllium, Total Recoverable	0.120	CC	0.120	2.00	1	06/21/2021 16:53	WG1692178
Antimony, Total Recoverable	0.754	CC	0.754	2.00	1	06/21/2021 16:53	WG1692178
Thallium, Total Recoverable	0.190	CC	0.190	2.00	1	06/21/2021 16:53	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	CC	0.120	0.500	1	06/14/2021 01:48	WG1687409
1,1,1-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 01:48	WG1687409
1,1,2,2-Tetrachloroethane	0.130	CC	0.130	0.500	1	06/14/2021 01:48	WG1687409
1,1,2-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 01:48	WG1687409
1,1-Dichloroethane	0.114	CC	0.114	0.500	1	06/14/2021 01:48	WG1687409
1,1-Dichloroethene	0.188	CC	0.188	0.500	1	06/14/2021 01:48	WG1687409
1,2,3-Trichloropropane	0.247	CC	0.247	2.50	1	06/14/2021 01:48	WG1687409
1,2-Dichlorobenzene	0.101	CC	0.101	0.500	1	06/14/2021 01:48	WG1687409
1,2-Dichloroethane	0.108	CC	0.108	0.500	1	06/14/2021 01:48	WG1687409
1,2-Dichloropropane	0.190	CC	0.190	0.500	1	06/14/2021 01:48	WG1687409
1,4-Dichlorobenzene	0.121	CC	0.121	0.500	1	06/14/2021 01:48	WG1687409
2-Butanone (MEK)	1.28	CC	1.28	5.00	1	06/14/2021 01:48	WG1687409
2-Hexanone	0.757	CC	0.757	5.00	1	06/14/2021 01:48	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	CC	0.823	5.00	1	06/14/2021 01:48	WG1687409
Acetone	1.05	CC	1.05	25.0	1	06/17/2021 01:27	WG1689128
Acrylonitrile	0.873	CC	0.873	5.00	1	06/14/2021 01:48	WG1687409
Benzene	0.0896	CC	0.0896	0.500	1	06/14/2021 01:48	WG1687409
Bromochloromethane	0.145	CC	0.145	0.500	1	06/14/2021 01:48	WG1687409
Bromodichloromethane	0.0800	CC	0.0800	0.500	1	06/14/2021 01:48	WG1687409
Bromoform	0.186	CC	0.186	0.500	1	06/14/2021 01:48	WG1687409
Bromomethane	0.157	CC	0.157	2.50	1	06/14/2021 01:48	WG1687409
Carbon disulfide	0.101	CC	0.101	0.500	1	06/14/2021 01:48	WG1687409
Carbon tetrachloride	0.159	CC	0.159	0.500	1	06/14/2021 01:48	WG1687409
Chlorobenzene	0.140	CC	0.140	0.500	1	06/14/2021 01:48	WG1687409
Chloroethane	0.141	CC	0.141	2.50	1	06/14/2021 01:48	WG1687409
Chloroform	0.0860	CC	0.0860	0.500	1	06/14/2021 01:48	WG1687409
Chloromethane	0.153	CC	0.153	1.25	1	06/14/2021 01:48	WG1687409
Dibromochloromethane	0.128	CC	0.128	0.500	1	06/14/2021 01:48	WG1687409
Dibromomethane	0.117	CC	0.117	0.500	1	06/14/2021 01:48	WG1687409
Ethylbenzene	0.158	CC	0.158	0.500	1	06/14/2021 01:48	WG1687409
Iodomethane	0.377	CC	0.377	10.0	1	06/14/2021 01:48	WG1687409
Methylene Chloride	1.07	CC	1.07	2.50	1	06/14/2021 01:48	WG1687409
Styrene	0.117	CC	0.117	0.500	1	06/14/2021 01:48	WG1687409
Tetrachloroethene	0.199	CC	0.199	0.500	1	06/14/2021 01:48	WG1687409
Toluene	0.412	CC	0.412	0.500	1	06/14/2021 01:48	WG1687409
Trichloroethene	0.153	CC	0.153	0.500	1	06/14/2021 01:48	WG1687409
Trichlorofluoromethane	0.130	CC	0.130	2.50	1	06/14/2021 01:48	WG1687409
Vinyl acetate	0.645	CC	0.645	5.00	1	06/14/2021 01:48	WG1687409
Vinyl chloride	0.118	CC	0.118	0.500	1	06/14/2021 01:48	WG1687409
Xylenes, Total	0.316	CC	0.316	1.50	1	06/14/2021 01:48	WG1687409
cis-1,2-Dichloroethene	0.0933	CC	0.0933	0.500	1	06/14/2021 01:48	WG1687409
cis-1,3-Dichloropropene	0.0976	CC	0.0976	0.500	1	06/14/2021 01:48	WG1687409
trans-1,2-Dichloroethene	0.152	CC	0.152	0.500	1	06/14/2021 01:48	WG1687409
trans-1,3-Dichloropropene	0.222	CC	0.222	0.500	1	06/14/2021 01:48	WG1687409
trans-1,4-Dichloro-2-butene	0.257	CC	0.257	5.00	1	06/17/2021 01:27	WG1689128
(S) 4-Bromofluorobenzene	99.5			77.0-126		06/14/2021 01:48	WG1687409
(S) 4-Bromofluorobenzene	87.4			77.0-126		06/17/2021 01:27	WG1689128
(S) Toluene-d8	102			80.0-120		06/14/2021 01:48	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	102			80.0-120		06/17/2021 01:27	WG1689128
(S) 1,2-Dichloroethane-d4	101			70.0-130		06/14/2021 01:48	WG1687409
(S) 1,2-Dichloroethane-d4	117			70.0-130		06/17/2021 01:27	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 18:58	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 18:58	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	53.12	ft
pH (On Site)	5.16	su
Temperature (on-site)	27.2	Deg. C
Specific Conductance (on site)	88	umhos/cm
Dissolved Oxygen (on-site)	3.3	mg/l
Turbidity (on-site)	3.1	NTU
eH/ORP (On Site)	245	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	61.0		10.0	1	06/09/2021 15:04	WG1685398

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10.3		0.0519	1.00	1	06/08/2021 18:33	WG1684598
Nitrate as (N)	3.98		0.0227	0.100	1	06/08/2021 18:33	WG1684598

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100	1	06/23/2021 14:33	WG1692269

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0843	<u>I</u>	0.0490	0.200	1	06/09/2021 15:53	WG1685209

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	3.30	<u>V</u>	0.0111	1.00	1	06/23/2021 05:30	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	<u>U</u>	2.80	5.00	1	06/23/2021 05:30	WG1692269
Barium, Total Recoverable	72.2		1.70	5.00	1	06/23/2021 05:30	WG1692269
Cadmium, Total Recoverable	0.700	<u>U</u>	0.700	2.00	1	06/23/2021 05:30	WG1692269
Cobalt, Total Recoverable	2.30	<u>U</u>	2.30	10.0	1	06/23/2021 05:30	WG1692269
Chromium, Total Recoverable	1.70	<u>I</u>	1.40	10.0	1	06/23/2021 05:30	WG1692269
Copper, Total Recoverable	5.30	<u>U</u>	5.30	10.0	1	06/23/2021 05:30	WG1692269
Iron, Total Recoverable	283		14.1	100	1	06/23/2021 05:30	WG1692269
Nickel, Total Recoverable	4.90	<u>U</u>	4.90	10.0	1	06/23/2021 05:30	WG1692269
Lead, Total Recoverable	1.90	<u>U</u>	1.90	5.00	1	06/23/2021 05:30	WG1692269
Selenium, Total Recoverable	7.40	<u>U</u>	7.40	10.0	1	06/23/2021 05:30	WG1692269
Vanadium, Total Recoverable	2.40	<u>U</u>	2.40	20.0	1	06/23/2021 05:30	WG1692269
Zinc, Total Recoverable	14.1	<u>I</u>	5.90	50.0	1	06/23/2021 05:30	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	CC	0.250	2.00	1	06/21/2021 16:57	WG1692178
Beryllium, Total Recoverable	0.120	CC	0.120	2.00	1	06/21/2021 16:57	WG1692178
Antimony, Total Recoverable	0.754	CC	0.754	2.00	1	06/21/2021 16:57	WG1692178
Thallium, Total Recoverable	0.190	CC	0.190	2.00	1	06/21/2021 16:57	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	CC	0.120	0.500	1	06/14/2021 02:07	WG1687409
1,1,1-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 02:07	WG1687409
1,1,2,2-Tetrachloroethane	0.130	CC	0.130	0.500	1	06/14/2021 02:07	WG1687409
1,1,2-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 02:07	WG1687409
1,1-Dichloroethane	0.114	CC	0.114	0.500	1	06/14/2021 02:07	WG1687409
1,1-Dichloroethene	0.188	CC	0.188	0.500	1	06/14/2021 02:07	WG1687409
1,2,3-Trichloropropane	0.247	CC	0.247	2.50	1	06/14/2021 02:07	WG1687409
1,2-Dichlorobenzene	0.101	CC	0.101	0.500	1	06/14/2021 02:07	WG1687409
1,2-Dichloroethane	0.108	CC	0.108	0.500	1	06/14/2021 02:07	WG1687409
1,2-Dichloropropane	0.190	CC	0.190	0.500	1	06/14/2021 02:07	WG1687409
1,4-Dichlorobenzene	0.121	CC	0.121	0.500	1	06/14/2021 02:07	WG1687409
2-Butanone (MEK)	1.28	CC	1.28	5.00	1	06/14/2021 02:07	WG1687409
2-Hexanone	0.757	CC	0.757	5.00	1	06/14/2021 02:07	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	CC	0.823	5.00	1	06/14/2021 02:07	WG1687409
Acetone	1.48	CC	1.05	25.0	1	06/17/2021 01:48	WG1689128
Acrylonitrile	0.873	CC	0.873	5.00	1	06/14/2021 02:07	WG1687409
Benzene	0.0896	CC	0.0896	0.500	1	06/14/2021 02:07	WG1687409
Bromochloromethane	0.145	CC	0.145	0.500	1	06/14/2021 02:07	WG1687409
Bromodichloromethane	0.0800	CC	0.0800	0.500	1	06/14/2021 02:07	WG1687409
Bromoform	0.186	CC	0.186	0.500	1	06/14/2021 02:07	WG1687409
Bromomethane	0.157	CC	0.157	2.50	1	06/14/2021 02:07	WG1687409
Carbon disulfide	0.101	CC	0.101	0.500	1	06/14/2021 02:07	WG1687409
Carbon tetrachloride	0.159	CC	0.159	0.500	1	06/14/2021 02:07	WG1687409
Chlorobenzene	0.140	CC	0.140	0.500	1	06/14/2021 02:07	WG1687409
Chloroethane	0.141	CC	0.141	2.50	1	06/14/2021 02:07	WG1687409
Chloroform	0.0860	CC	0.0860	0.500	1	06/14/2021 02:07	WG1687409
Chloromethane	0.153	CC	0.153	1.25	1	06/14/2021 02:07	WG1687409
Dibromochloromethane	0.128	CC	0.128	0.500	1	06/14/2021 02:07	WG1687409
Dibromomethane	0.117	CC	0.117	0.500	1	06/14/2021 02:07	WG1687409
Ethylbenzene	0.158	CC	0.158	0.500	1	06/14/2021 02:07	WG1687409
Iodomethane	0.377	CC	0.377	10.0	1	06/14/2021 02:07	WG1687409
Methylene Chloride	1.07	CC	1.07	2.50	1	06/14/2021 02:07	WG1687409
Styrene	0.117	CC	0.117	0.500	1	06/14/2021 02:07	WG1687409
Tetrachloroethene	0.199	CC	0.199	0.500	1	06/14/2021 02:07	WG1687409
Toluene	0.412	CC	0.412	0.500	1	06/14/2021 02:07	WG1687409
Trichloroethene	0.153	CC	0.153	0.500	1	06/14/2021 02:07	WG1687409
Trichlorofluoromethane	0.130	CC	0.130	2.50	1	06/14/2021 02:07	WG1687409
Vinyl acetate	0.645	CC	0.645	5.00	1	06/14/2021 02:07	WG1687409
Vinyl chloride	0.118	CC	0.118	0.500	1	06/14/2021 02:07	WG1687409
Xylenes, Total	0.316	CC	0.316	1.50	1	06/14/2021 02:07	WG1687409
cis-1,2-Dichloroethene	0.0933	CC	0.0933	0.500	1	06/14/2021 02:07	WG1687409
cis-1,3-Dichloropropene	0.0976	CC	0.0976	0.500	1	06/14/2021 02:07	WG1687409
trans-1,2-Dichloroethene	0.152	CC	0.152	0.500	1	06/14/2021 02:07	WG1687409
trans-1,3-Dichloropropene	0.222	CC	0.222	0.500	1	06/14/2021 02:07	WG1687409
trans-1,4-Dichloro-2-butene	0.257	CC	0.257	5.00	1	06/17/2021 01:48	WG1689128
(S) 4-Bromofluorobenzene	99.7			77.0-126		06/14/2021 02:07	WG1687409
(S) 4-Bromofluorobenzene	88.2			77.0-126		06/17/2021 01:48	WG1689128
(S) Toluene-d8	103			80.0-120		06/14/2021 02:07	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	104			80.0-120		06/17/2021 01:48	WG1689128
(S) 1,2-Dichloroethane-d4	99.9			70.0-130		06/14/2021 02:07	WG1687409
(S) 1,2-Dichloroethane-d4	124			70.0-130		06/17/2021 01:48	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 21:59	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 21:59	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	66.7	ft
pH (On Site)	7.7	su
Temperature (on-site)	27.5	Deg. C
Specific Conductance (on site)	328	umhos/cm
Dissolved Oxygen (on-site)	.6	mg/l
Turbidity (on-site)	3.8	NTU
eH/ORP (On Site)	85	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	227		10.0	1	06/09/2021 15:04	WG1685398

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	11.9		0.0519	1.00	1	06/08/2021 19:22	WG1684598
Nitrate as (N)	9.59		0.114	0.500	5	06/09/2021 09:23	WG1684598

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100	1	06/23/2021 14:34	WG1692269

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0490	<u>U</u>	0.0490	0.200	1	06/09/2021 15:55	WG1685209

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	6.28		0.0111	1.00	1	06/23/2021 05:37	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	<u>U</u>	2.80	5.00	1	06/23/2021 05:37	WG1692269
Barium, Total Recoverable	17.1		1.70	5.00	1	06/23/2021 05:37	WG1692269
Cadmium, Total Recoverable	0.700	<u>U</u>	0.700	2.00	1	06/23/2021 05:37	WG1692269
Cobalt, Total Recoverable	2.30	<u>U</u>	2.30	10.0	1	06/23/2021 05:37	WG1692269
Chromium, Total Recoverable	1.40	<u>U</u>	1.40	10.0	1	06/23/2021 05:37	WG1692269
Copper, Total Recoverable	5.30	<u>U</u>	5.30	10.0	1	06/23/2021 05:37	WG1692269
Iron, Total Recoverable	367		14.1	100	1	06/23/2021 05:37	WG1692269
Nickel, Total Recoverable	4.90	<u>U</u>	4.90	10.0	1	06/23/2021 05:37	WG1692269
Lead, Total Recoverable	1.90	<u>U</u>	1.90	5.00	1	06/23/2021 05:37	WG1692269
Selenium, Total Recoverable	7.40	<u>U</u>	7.40	10.0	1	06/23/2021 05:37	WG1692269
Vanadium, Total Recoverable	2.40	<u>U</u>	2.40	20.0	1	06/23/2021 05:37	WG1692269
Zinc, Total Recoverable	13.2	<u>I</u>	5.90	50.0	1	06/23/2021 05:37	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.545	1	0.250	2.00	1	06/21/2021 17:11	WG1692178
Beryllium, Total Recoverable	0.120	1	0.120	2.00	1	06/21/2021 17:11	WG1692178
Antimony, Total Recoverable	0.754	1	0.754	2.00	1	06/21/2021 17:11	WG1692178
Thallium, Total Recoverable	0.190	1	0.190	2.00	1	06/21/2021 17:11	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	1	0.120	0.500	1	06/14/2021 02:26	WG1687409
1,1,1-Trichloroethane	0.0940	1	0.0940	0.500	1	06/14/2021 02:26	WG1687409
1,1,2,2-Tetrachloroethane	0.130	1	0.130	0.500	1	06/14/2021 02:26	WG1687409
1,1,2-Trichloroethane	0.0940	1	0.0940	0.500	1	06/14/2021 02:26	WG1687409
1,1-Dichloroethane	0.114	1	0.114	0.500	1	06/14/2021 02:26	WG1687409
1,1-Dichloroethene	0.188	1	0.188	0.500	1	06/14/2021 02:26	WG1687409
1,2,3-Trichloropropane	0.247	1	0.247	2.50	1	06/14/2021 02:26	WG1687409
1,2-Dichlorobenzene	0.101	1	0.101	0.500	1	06/14/2021 02:26	WG1687409
1,2-Dichloroethane	0.108	1	0.108	0.500	1	06/14/2021 02:26	WG1687409
1,2-Dichloropropane	0.190	1	0.190	0.500	1	06/14/2021 02:26	WG1687409
1,4-Dichlorobenzene	0.121	1	0.121	0.500	1	06/14/2021 02:26	WG1687409
2-Butanone (MEK)	1.28	1	1.28	5.00	1	06/14/2021 02:26	WG1687409
2-Hexanone	0.757	1	0.757	5.00	1	06/14/2021 02:26	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	1	0.823	5.00	1	06/14/2021 02:26	WG1687409
Acetone	1.05	1	1.05	25.0	1	06/17/2021 02:43	WG1689128
Acrylonitrile	0.873	1	0.873	5.00	1	06/14/2021 02:26	WG1687409
Benzene	0.0896	1	0.0896	0.500	1	06/14/2021 02:26	WG1687409
Bromochloromethane	0.145	1	0.145	0.500	1	06/14/2021 02:26	WG1687409
Bromodichloromethane	0.0800	1	0.0800	0.500	1	06/14/2021 02:26	WG1687409
Bromoform	0.186	1	0.186	0.500	1	06/14/2021 02:26	WG1687409
Bromomethane	0.157	1	0.157	2.50	1	06/14/2021 02:26	WG1687409
Carbon disulfide	0.101	1	0.101	0.500	1	06/14/2021 02:26	WG1687409
Carbon tetrachloride	0.159	1	0.159	0.500	1	06/14/2021 02:26	WG1687409
Chlorobenzene	0.140	1	0.140	0.500	1	06/14/2021 02:26	WG1687409
Chloroethane	0.141	1	0.141	2.50	1	06/14/2021 02:26	WG1687409
Chloroform	0.0860	1	0.0860	0.500	1	06/14/2021 02:26	WG1687409
Chloromethane	0.153	1	0.153	1.25	1	06/14/2021 02:26	WG1687409
Dibromochloromethane	0.128	1	0.128	0.500	1	06/14/2021 02:26	WG1687409
Dibromomethane	0.117	1	0.117	0.500	1	06/14/2021 02:26	WG1687409
Ethylbenzene	0.158	1	0.158	0.500	1	06/14/2021 02:26	WG1687409
Iodomethane	0.377	1	0.377	10.0	1	06/14/2021 02:26	WG1687409
Methylene Chloride	1.07	1	1.07	2.50	1	06/14/2021 02:26	WG1687409
Styrene	0.185	1	0.117	0.500	1	06/14/2021 02:26	WG1687409
Tetrachloroethene	0.199	1	0.199	0.500	1	06/14/2021 02:26	WG1687409
Toluene	0.412	1	0.412	0.500	1	06/14/2021 02:26	WG1687409
Trichloroethene	0.153	1	0.153	0.500	1	06/14/2021 02:26	WG1687409
Trichlorofluoromethane	0.130	1	0.130	2.50	1	06/14/2021 02:26	WG1687409
Vinyl acetate	0.645	1	0.645	5.00	1	06/14/2021 02:26	WG1687409
Vinyl chloride	0.118	1	0.118	0.500	1	06/14/2021 02:26	WG1687409
Xylenes, Total	0.316	1	0.316	1.50	1	06/14/2021 02:26	WG1687409
cis-1,2-Dichloroethene	0.0933	1	0.0933	0.500	1	06/14/2021 02:26	WG1687409
cis-1,3-Dichloropropene	0.0976	1	0.0976	0.500	1	06/14/2021 02:26	WG1687409
trans-1,2-Dichloroethene	0.152	1	0.152	0.500	1	06/14/2021 02:26	WG1687409
trans-1,3-Dichloropropene	0.222	1	0.222	0.500	1	06/14/2021 02:26	WG1687409
trans-1,4-Dichloro-2-butene	0.257	1	0.257	5.00	1	06/17/2021 02:43	WG1689128
(S) 4-Bromofluorobenzene	99.7			77.0-126		06/14/2021 02:26	WG1687409
(S) 4-Bromofluorobenzene	88.4			77.0-126		06/17/2021 02:43	WG1689128
(S) Toluene-d8	102			80.0-120		06/14/2021 02:26	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	107			80.0-120		06/17/2021 02:43	WG1689128
(S) 1,2-Dichloroethane-d4	99.0			70.0-130		06/14/2021 02:26	WG1687409
(S) 1,2-Dichloroethane-d4	115			70.0-130		06/17/2021 02:43	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 22:11	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 22:11	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

	Result	Units
Analyte		
Sampling Method	BP	
pH (On Site)	6.64	su
Temperature (on-site)	26.1	Deg. C
Specific Conductance (on site)	82	umhos/cm
Dissolved Oxygen (on-site)	1.3	mg/l
Turbidity (on-site)	4.8	NTU
eH/ORP (On Site)	148	mV

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte						
Dissolved Solids	69.0		10.0	1	06/08/2021 19:35	WG1685068

Wet Chemistry by Method 300.0

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Chloride	4.83		0.0519	1.00	1	06/08/2021 19:39	WG1684598
Nitrate as (N)	0.434		0.0227	0.100	1	06/08/2021 19:39	WG1684598

Wet Chemistry by Method 350.1

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Ammonia Nitrogen	0.0317	U	0.0317	0.100	1	06/23/2021 14:41	WG1692603

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Mercury	0.0490	U	0.0490	0.200	1	06/09/2021 15:57	WG1685209

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Sodium, Total Recoverable	3.20	V	0.0111	1.00	1	06/23/2021 05:40	WG1692269
Analyte							
Silver, Total Recoverable	2.80	U	2.80	5.00	1	06/23/2021 05:40	WG1692269
Barium, Total Recoverable	7.98		1.70	5.00	1	06/23/2021 05:40	WG1692269
Cadmium, Total Recoverable	0.700	U	0.700	2.00	1	06/23/2021 05:40	WG1692269
Cobalt, Total Recoverable	2.30	U	2.30	10.0	1	06/23/2021 05:40	WG1692269
Chromium, Total Recoverable	5.93	I	1.40	10.0	1	06/23/2021 05:40	WG1692269
Copper, Total Recoverable	5.30	U	5.30	10.0	1	06/23/2021 05:40	WG1692269
Iron, Total Recoverable	840		14.1	100	1	06/23/2021 05:40	WG1692269
Nickel, Total Recoverable	4.90	U	4.90	10.0	1	06/23/2021 05:40	WG1692269
Lead, Total Recoverable	1.90	U	1.90	5.00	1	06/23/2021 05:40	WG1692269
Selenium, Total Recoverable	7.40	U	7.40	10.0	1	06/23/2021 05:40	WG1692269
Vanadium, Total Recoverable	4.38	I	2.40	20.0	1	06/23/2021 05:40	WG1692269
Zinc, Total Recoverable	8.52	I	5.90	50.0	1	06/23/2021 05:40	WG1692269

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	CC	0.250	2.00	1	06/21/2021 17:15	WG1692178
Beryllium, Total Recoverable	0.120	CC	0.120	2.00	1	06/21/2021 17:15	WG1692178
Antimony, Total Recoverable	0.754	CC	0.754	2.00	1	06/21/2021 17:15	WG1692178
Thallium, Total Recoverable	0.190	CC	0.190	2.00	1	06/21/2021 17:15	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	CC	0.120	0.500	1	06/14/2021 02:45	WG1687409
1,1,1-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 02:45	WG1687409
1,1,2,2-Tetrachloroethane	0.130	CC	0.130	0.500	1	06/14/2021 02:45	WG1687409
1,1,2-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 02:45	WG1687409
1,1-Dichloroethane	0.114	CC	0.114	0.500	1	06/14/2021 02:45	WG1687409
1,1-Dichloroethene	0.188	CC	0.188	0.500	1	06/14/2021 02:45	WG1687409
1,2,3-Trichloropropane	0.247	CC	0.247	2.50	1	06/14/2021 02:45	WG1687409
1,2-Dichlorobenzene	0.101	CC	0.101	0.500	1	06/14/2021 02:45	WG1687409
1,2-Dichloroethane	0.108	CC	0.108	0.500	1	06/14/2021 02:45	WG1687409
1,2-Dichloropropane	0.190	CC	0.190	0.500	1	06/14/2021 02:45	WG1687409
1,4-Dichlorobenzene	0.121	CC	0.121	0.500	1	06/14/2021 02:45	WG1687409
2-Butanone (MEK)	1.28	CC	1.28	5.00	1	06/14/2021 02:45	WG1687409
2-Hexanone	0.757	CC	0.757	5.00	1	06/14/2021 02:45	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	CC	0.823	5.00	1	06/14/2021 02:45	WG1687409
Acetone	1.58	CC	1.05	25.0	1	06/17/2021 03:04	WG1689128
Acrylonitrile	0.873	CC	0.873	5.00	1	06/14/2021 02:45	WG1687409
Benzene	0.0896	CC	0.0896	0.500	1	06/14/2021 02:45	WG1687409
Bromochloromethane	0.145	CC	0.145	0.500	1	06/14/2021 02:45	WG1687409
Bromodichloromethane	0.0800	CC	0.0800	0.500	1	06/14/2021 02:45	WG1687409
Bromoform	0.186	CC	0.186	0.500	1	06/14/2021 02:45	WG1687409
Bromomethane	0.157	CC	0.157	2.50	1	06/14/2021 02:45	WG1687409
Carbon disulfide	0.101	CC	0.101	0.500	1	06/14/2021 02:45	WG1687409
Carbon tetrachloride	0.159	CC	0.159	0.500	1	06/14/2021 02:45	WG1687409
Chlorobenzene	0.140	CC	0.140	0.500	1	06/14/2021 02:45	WG1687409
Chloroethane	0.141	CC	0.141	2.50	1	06/14/2021 02:45	WG1687409
Chloroform	0.0860	CC	0.0860	0.500	1	06/14/2021 02:45	WG1687409
Chloromethane	0.153	CC	0.153	1.25	1	06/14/2021 02:45	WG1687409
Dibromochloromethane	0.128	CC	0.128	0.500	1	06/14/2021 02:45	WG1687409
Dibromomethane	0.117	CC	0.117	0.500	1	06/14/2021 02:45	WG1687409
Ethylbenzene	0.158	CC	0.158	0.500	1	06/14/2021 02:45	WG1687409
Iodomethane	0.377	CC	0.377	10.0	1	06/14/2021 02:45	WG1687409
Methylene Chloride	1.07	CC	1.07	2.50	1	06/14/2021 02:45	WG1687409
Styrene	0.238	CC	0.117	0.500	1	06/14/2021 02:45	WG1687409
Tetrachloroethene	0.199	CC	0.199	0.500	1	06/14/2021 02:45	WG1687409
Toluene	0.412	CC	0.412	0.500	1	06/14/2021 02:45	WG1687409
Trichloroethene	0.153	CC	0.153	0.500	1	06/14/2021 02:45	WG1687409
Trichlorofluoromethane	0.130	CC	0.130	2.50	1	06/14/2021 02:45	WG1687409
Vinyl acetate	0.645	CC	0.645	5.00	1	06/14/2021 02:45	WG1687409
Vinyl chloride	0.118	CC	0.118	0.500	1	06/14/2021 02:45	WG1687409
Xylenes, Total	0.316	CC	0.316	1.50	1	06/14/2021 02:45	WG1687409
cis-1,2-Dichloroethene	0.0933	CC	0.0933	0.500	1	06/14/2021 02:45	WG1687409
cis-1,3-Dichloropropene	0.0976	CC	0.0976	0.500	1	06/14/2021 02:45	WG1687409
trans-1,2-Dichloroethene	0.152	CC	0.152	0.500	1	06/14/2021 02:45	WG1687409
trans-1,3-Dichloropropene	0.222	CC	0.222	0.500	1	06/14/2021 02:45	WG1687409
trans-1,4-Dichloro-2-butene	0.257	CC	0.257	5.00	1	06/17/2021 03:04	WG1689128
(S) 4-Bromofluorobenzene	101			77.0-126		06/14/2021 02:45	WG1687409
(S) 4-Bromofluorobenzene	85.1			77.0-126		06/17/2021 03:04	WG1689128
(S) Toluene-d8	102			80.0-120		06/14/2021 02:45	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	103			80.0-120		06/17/2021 03:04	WG1689128
(S) 1,2-Dichloroethane-d4	100			70.0-130		06/14/2021 02:45	WG1687409
(S) 1,2-Dichloroethane-d4	118			70.0-130		06/17/2021 03:04	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 22:23	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 22:23	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

	Result	Units
Analyte		
Sampling Method	BP	
pH (On Site)	7.6	su
Temperature (on-site)	25.4	Deg. C
Specific Conductance (on site)	369	umhos/cm
Dissolved Oxygen (on-site)	2.5	mg/l
Turbidity (on-site)	4.7	NTU
eH/ORP (On Site)	98	mV

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte						
Dissolved Solids	253		10.0	1	06/09/2021 15:04	WG1685398

Wet Chemistry by Method 300.0

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Chloride	8.50		0.0519	1.00	1	06/08/2021 19:55	WG1684598
Nitrate as (N)	15.1		0.114	0.500	5	06/08/2021 20:11	WG1684598

Wet Chemistry by Method 350.1

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Ammonia Nitrogen	0.0317	U	0.0317	0.100	1	06/23/2021 14:43	WG1692603

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Mercury	0.0490	U	0.0490	0.200	1	06/09/2021 15:59	WG1685209

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Sodium, Total Recoverable	9.92		0.0111	1.00	1	06/23/2021 05:43	WG1692269
Analyte							
Silver, Total Recoverable	2.80	U	2.80	5.00	1	06/23/2021 05:43	WG1692269
Barium, Total Recoverable	17.9		1.70	5.00	1	06/23/2021 05:43	WG1692269
Cadmium, Total Recoverable	0.700	U	0.700	2.00	1	06/23/2021 05:43	WG1692269
Cobalt, Total Recoverable	2.30	U	2.30	10.0	1	06/23/2021 05:43	WG1692269
Chromium, Total Recoverable	3.88	I	1.40	10.0	1	06/23/2021 05:43	WG1692269
Copper, Total Recoverable	5.30	U	5.30	10.0	1	06/23/2021 05:43	WG1692269
Iron, Total Recoverable	242		14.1	100	1	06/23/2021 05:43	WG1692269
Nickel, Total Recoverable	4.90	U	4.90	10.0	1	06/23/2021 05:43	WG1692269
Lead, Total Recoverable	1.90	U	1.90	5.00	1	06/23/2021 05:43	WG1692269
Selenium, Total Recoverable	7.40	U	7.40	10.0	1	06/23/2021 05:43	WG1692269
Vanadium, Total Recoverable	3.38	I	2.40	20.0	1	06/23/2021 05:43	WG1692269
Zinc, Total Recoverable	5.90	U	5.90	50.0	1	06/23/2021 05:43	WG1692269

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	1.72	!	0.250	2.00	1	06/21/2021 17:18	WG1692178
Beryllium, Total Recoverable	0.120	U	0.120	2.00	1	06/21/2021 17:18	WG1692178
Antimony, Total Recoverable	0.754	U	0.754	2.00	1	06/21/2021 17:18	WG1692178
Thallium, Total Recoverable	0.532	!	0.190	2.00	1	06/21/2021 17:18	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	U	0.120	0.500	1	06/14/2021 03:04	WG1687409
1,1,1-Trichloroethane	0.0940	U	0.0940	0.500	1	06/14/2021 03:04	WG1687409
1,1,2,2-Tetrachloroethane	0.130	U	0.130	0.500	1	06/14/2021 03:04	WG1687409
1,1,2-Trichloroethane	0.0940	U	0.0940	0.500	1	06/14/2021 03:04	WG1687409
1,1-Dichloroethane	0.114	U	0.114	0.500	1	06/14/2021 03:04	WG1687409
1,1-Dichloroethene	0.188	U	0.188	0.500	1	06/14/2021 03:04	WG1687409
1,2,3-Trichloropropane	0.247	U	0.247	2.50	1	06/14/2021 03:04	WG1687409
1,2-Dichlorobenzene	0.101	U	0.101	0.500	1	06/14/2021 03:04	WG1687409
1,2-Dichloroethane	0.108	U	0.108	0.500	1	06/14/2021 03:04	WG1687409
1,2-Dichloropropane	0.190	U	0.190	0.500	1	06/14/2021 03:04	WG1687409
1,4-Dichlorobenzene	0.121	U	0.121	0.500	1	06/14/2021 03:04	WG1687409
2-Butanone (MEK)	1.28	U	1.28	5.00	1	06/14/2021 03:04	WG1687409
2-Hexanone	0.757	U	0.757	5.00	1	06/14/2021 03:04	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	U	0.823	5.00	1	06/14/2021 03:04	WG1687409
Acetone	1.05	U	1.05	25.0	1	06/17/2021 03:24	WG1689128
Acrylonitrile	0.873	U	0.873	5.00	1	06/14/2021 03:04	WG1687409
Benzene	0.0896	U	0.0896	0.500	1	06/14/2021 03:04	WG1687409
Bromochloromethane	0.145	U	0.145	0.500	1	06/14/2021 03:04	WG1687409
Bromodichloromethane	0.0800	U	0.0800	0.500	1	06/14/2021 03:04	WG1687409
Bromoform	0.186	U	0.186	0.500	1	06/14/2021 03:04	WG1687409
Bromomethane	0.157	U	0.157	2.50	1	06/14/2021 03:04	WG1687409
Carbon disulfide	0.101	U	0.101	0.500	1	06/14/2021 03:04	WG1687409
Carbon tetrachloride	0.159	U	0.159	0.500	1	06/14/2021 03:04	WG1687409
Chlorobenzene	0.140	U	0.140	0.500	1	06/14/2021 03:04	WG1687409
Chloroethane	0.141	U	0.141	2.50	1	06/14/2021 03:04	WG1687409
Chloroform	0.0860	U	0.0860	0.500	1	06/14/2021 03:04	WG1687409
Chloromethane	0.153	U	0.153	1.25	1	06/14/2021 03:04	WG1687409
Dibromochloromethane	0.128	U	0.128	0.500	1	06/14/2021 03:04	WG1687409
Dibromomethane	0.117	U	0.117	0.500	1	06/14/2021 03:04	WG1687409
Ethylbenzene	0.158	U	0.158	0.500	1	06/14/2021 03:04	WG1687409
Iodomethane	0.377	U	0.377	10.0	1	06/14/2021 03:04	WG1687409
Methylene Chloride	1.07	U	1.07	2.50	1	06/14/2021 03:04	WG1687409
Styrene	0.117	U	0.117	0.500	1	06/14/2021 03:04	WG1687409
Tetrachloroethene	0.199	U	0.199	0.500	1	06/14/2021 03:04	WG1687409
Toluene	0.412	U	0.412	0.500	1	06/14/2021 03:04	WG1687409
Trichloroethene	0.153	U	0.153	0.500	1	06/14/2021 03:04	WG1687409
Trichlorofluoromethane	0.130	U	0.130	2.50	1	06/14/2021 03:04	WG1687409
Vinyl acetate	0.645	U	0.645	5.00	1	06/14/2021 03:04	WG1687409
Vinyl chloride	0.118	U	0.118	0.500	1	06/14/2021 03:04	WG1687409
Xylenes, Total	0.316	U	0.316	1.50	1	06/14/2021 03:04	WG1687409
cis-1,2-Dichloroethene	0.0933	U	0.0933	0.500	1	06/14/2021 03:04	WG1687409
cis-1,3-Dichloropropene	0.0976	U	0.0976	0.500	1	06/14/2021 03:04	WG1687409
trans-1,2-Dichloroethene	0.152	U	0.152	0.500	1	06/14/2021 03:04	WG1687409
trans-1,3-Dichloropropene	0.222	U	0.222	0.500	1	06/14/2021 03:04	WG1687409
trans-1,4-Dichloro-2-butene	0.257	U	0.257	5.00	1	06/17/2021 03:24	WG1689128
(S) 4-Bromofluorobenzene	99.4			77.0-126		06/14/2021 03:04	WG1687409
(S) 4-Bromofluorobenzene	85.3			77.0-126		06/17/2021 03:24	WG1689128
(S) Toluene-d8	103			80.0-120		06/14/2021 03:04	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	104			80.0-120		06/17/2021 03:24	WG1689128
(S) 1,2-Dichloroethane-d4	99.8			70.0-130		06/14/2021 03:04	WG1687409
(S) 1,2-Dichloroethane-d4	115			70.0-130		06/17/2021 03:24	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 22:35	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 22:35	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

	Result	Units
Analyte		
Sampling Method	BP	
pH (On Site)	5.81	su
Temperature (on-site)	26.1	Deg. C
Specific Conductance (on site)	73	umhos/cm
Dissolved Oxygen (on-site)	1.5	mg/l
Turbidity (on-site)	8.6	NTU
eH/ORP (On Site)	180	mV

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte						
Dissolved Solids	65.0		10.0	1	06/08/2021 19:35	WG1685068

Wet Chemistry by Method 300.0

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Chloride	8.44		0.0519	1.00	1	06/08/2021 20:28	WG1684598
Nitrate as (N)	2.00		0.0227	0.100	1	06/08/2021 20:28	WG1684598

Wet Chemistry by Method 350.1

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Ammonia Nitrogen	0.0317	U	0.0317	0.100	1	06/23/2021 14:44	WG1692603

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Mercury	0.0490	U	0.0490	0.200	1	06/09/2021 16:01	WG1685209

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Sodium, Total Recoverable	5.15	V	0.0111	1.00	1	06/23/2021 05:46	WG1692269
Analyte							
Silver, Total Recoverable	2.80	U	2.80	5.00	1	06/23/2021 05:46	WG1692269
Barium, Total Recoverable	9.40		1.70	5.00	1	06/23/2021 05:46	WG1692269
Cadmium, Total Recoverable	0.700	U	0.700	2.00	1	06/23/2021 05:46	WG1692269
Cobalt, Total Recoverable	2.30	U	2.30	10.0	1	06/23/2021 05:46	WG1692269
Chromium, Total Recoverable	3.24	I	1.40	10.0	1	06/23/2021 05:46	WG1692269
Copper, Total Recoverable	5.30	U	5.30	10.0	1	06/23/2021 05:46	WG1692269
Iron, Total Recoverable	488		14.1	100	1	06/23/2021 05:46	WG1692269
Nickel, Total Recoverable	4.90	U	4.90	10.0	1	06/23/2021 05:46	WG1692269
Lead, Total Recoverable	1.90	U	1.90	5.00	1	06/23/2021 05:46	WG1692269
Selenium, Total Recoverable	7.40	U	7.40	10.0	1	06/23/2021 05:46	WG1692269
Vanadium, Total Recoverable	2.40	U	2.40	20.0	1	06/23/2021 05:46	WG1692269
Zinc, Total Recoverable	7.49	I	5.90	50.0	1	06/23/2021 05:46	WG1692269

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.527	1	0.250	2.00	1	06/21/2021 17:22	WG1692178
Beryllium, Total Recoverable	0.120	1	0.120	2.00	1	06/21/2021 17:22	WG1692178
Antimony, Total Recoverable	0.754	1	0.754	2.00	1	06/21/2021 17:22	WG1692178
Thallium, Total Recoverable	0.190	1	0.190	2.00	1	06/21/2021 17:22	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	1	0.120	0.500	1	06/14/2021 03:23	WG1687409
1,1,1-Trichloroethane	0.0940	1	0.0940	0.500	1	06/14/2021 03:23	WG1687409
1,1,2,2-Tetrachloroethane	0.130	1	0.130	0.500	1	06/14/2021 03:23	WG1687409
1,1,2-Trichloroethane	0.0940	1	0.0940	0.500	1	06/14/2021 03:23	WG1687409
1,1-Dichloroethane	0.114	1	0.114	0.500	1	06/14/2021 03:23	WG1687409
1,1-Dichloroethene	0.188	1	0.188	0.500	1	06/14/2021 03:23	WG1687409
1,2,3-Trichloropropane	0.247	1	0.247	2.50	1	06/14/2021 03:23	WG1687409
1,2-Dichlorobenzene	0.101	1	0.101	0.500	1	06/14/2021 03:23	WG1687409
1,2-Dichloroethane	0.108	1	0.108	0.500	1	06/14/2021 03:23	WG1687409
1,2-Dichloropropane	0.190	1	0.190	0.500	1	06/14/2021 03:23	WG1687409
1,4-Dichlorobenzene	0.121	1	0.121	0.500	1	06/14/2021 03:23	WG1687409
2-Butanone (MEK)	1.28	1	1.28	5.00	1	06/14/2021 03:23	WG1687409
2-Hexanone	0.757	1	0.757	5.00	1	06/14/2021 03:23	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	1	0.823	5.00	1	06/14/2021 03:23	WG1687409
Acetone	1.05	1	1.05	25.0	1	06/17/2021 03:44	WG1689128
Acrylonitrile	0.873	1	0.873	5.00	1	06/14/2021 03:23	WG1687409
Benzene	0.0896	1	0.0896	0.500	1	06/14/2021 03:23	WG1687409
Bromochloromethane	0.145	1	0.145	0.500	1	06/14/2021 03:23	WG1687409
Bromodichloromethane	0.0800	1	0.0800	0.500	1	06/14/2021 03:23	WG1687409
Bromoform	0.186	1	0.186	0.500	1	06/14/2021 03:23	WG1687409
Bromomethane	0.157	1	0.157	2.50	1	06/14/2021 03:23	WG1687409
Carbon disulfide	0.101	1	0.101	0.500	1	06/14/2021 03:23	WG1687409
Carbon tetrachloride	0.159	1	0.159	0.500	1	06/14/2021 03:23	WG1687409
Chlorobenzene	0.140	1	0.140	0.500	1	06/14/2021 03:23	WG1687409
Chloroethane	0.141	1	0.141	2.50	1	06/14/2021 03:23	WG1687409
Chloroform	0.0860	1	0.0860	0.500	1	06/14/2021 03:23	WG1687409
Chloromethane	0.153	1	0.153	1.25	1	06/14/2021 03:23	WG1687409
Dibromochloromethane	0.128	1	0.128	0.500	1	06/14/2021 03:23	WG1687409
Dibromomethane	0.117	1	0.117	0.500	1	06/14/2021 03:23	WG1687409
Ethylbenzene	0.158	1	0.158	0.500	1	06/14/2021 03:23	WG1687409
Iodomethane	0.377	1	0.377	10.0	1	06/14/2021 03:23	WG1687409
Methylene Chloride	1.07	1	1.07	2.50	1	06/14/2021 03:23	WG1687409
Styrene	0.117	1	0.117	0.500	1	06/14/2021 03:23	WG1687409
Tetrachloroethene	0.199	1	0.199	0.500	1	06/14/2021 03:23	WG1687409
Toluene	0.412	1	0.412	0.500	1	06/14/2021 03:23	WG1687409
Trichloroethene	0.153	1	0.153	0.500	1	06/14/2021 03:23	WG1687409
Trichlorofluoromethane	0.130	1	0.130	2.50	1	06/14/2021 03:23	WG1687409
Vinyl acetate	0.645	1	0.645	5.00	1	06/14/2021 03:23	WG1687409
Vinyl chloride	0.118	1	0.118	0.500	1	06/14/2021 03:23	WG1687409
Xylenes, Total	0.316	1	0.316	1.50	1	06/14/2021 03:23	WG1687409
cis-1,2-Dichloroethene	0.0933	1	0.0933	0.500	1	06/14/2021 03:23	WG1687409
cis-1,3-Dichloropropene	0.0976	1	0.0976	0.500	1	06/14/2021 03:23	WG1687409
trans-1,2-Dichloroethene	0.152	1	0.152	0.500	1	06/14/2021 03:23	WG1687409
trans-1,3-Dichloropropene	0.222	1	0.222	0.500	1	06/14/2021 03:23	WG1687409
trans-1,4-Dichloro-2-butene	0.257	1	0.257	5.00	1	06/17/2021 03:44	WG1689128
(S) 4-Bromofluorobenzene	99.0			77.0-126		06/14/2021 03:23	WG1687409
(S) 4-Bromofluorobenzene	94.0			77.0-126		06/17/2021 03:44	WG1689128
(S) Toluene-d8	103			80.0-120		06/14/2021 03:23	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	109			80.0-120		06/17/2021 03:44	WG1689128
(S) 1,2-Dichloroethane-d4	103			70.0-130		06/14/2021 03:23	WG1687409
(S) 1,2-Dichloroethane-d4	117			70.0-130		06/17/2021 03:44	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 22:47	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 22:47	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

	Result	Units
Analyte		
Sampling Method	BP	
pH (On Site)	4.85	su
Temperature (on-site)	26.4	Deg. C
Specific Conductance (on site)	63	umhos/cm
Dissolved Oxygen (on-site)	2.4	mg/l
Turbidity (on-site)	3.2	NTU
eH/ORP (On Site)	193	mV

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte						
Dissolved Solids	38.0		10.0	1	06/09/2021 15:04	WG1685398

Wet Chemistry by Method 300.0

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Chloride	7.96		0.0519	1.00	1	06/08/2021 20:44	WG1684598
Nitrate as (N)	1.13		0.0227	0.100	1	06/08/2021 20:44	WG1684598

Wet Chemistry by Method 350.1

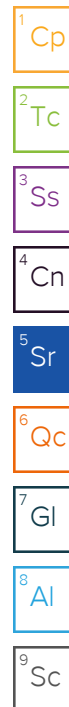
	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Ammonia Nitrogen	0.0317	U	0.0317	0.100	1	06/23/2021 14:46	WG1692269

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Mercury	0.474		0.0490	0.200	1	06/09/2021 16:03	WG1685209

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte							
Sodium, Total Recoverable	4.86	V	0.0111	1.00	1	06/23/2021 05:48	WG1692269
Analyte							
Silver, Total Recoverable	2.80	U	2.80	5.00	1	06/23/2021 05:48	WG1692269
Barium, Total Recoverable	5.08		1.70	5.00	1	06/23/2021 05:48	WG1692269
Cadmium, Total Recoverable	0.700	U	0.700	2.00	1	06/23/2021 05:48	WG1692269
Cobalt, Total Recoverable	2.30	U	2.30	10.0	1	06/23/2021 05:48	WG1692269
Chromium, Total Recoverable	1.40	U	1.40	10.0	1	06/23/2021 05:48	WG1692269
Copper, Total Recoverable	5.30	U	5.30	10.0	1	06/23/2021 05:48	WG1692269
Iron, Total Recoverable	20.3	I	14.1	100	1	06/23/2021 05:48	WG1692269
Nickel, Total Recoverable	4.90	U	4.90	10.0	1	06/23/2021 05:48	WG1692269
Lead, Total Recoverable	1.90	U	1.90	5.00	1	06/23/2021 05:48	WG1692269
Selenium, Total Recoverable	7.40	U	7.40	10.0	1	06/23/2021 05:48	WG1692269
Vanadium, Total Recoverable	2.40	U	2.40	20.0	1	06/23/2021 05:48	WG1692269
Zinc, Total Recoverable	5.90	U	5.90	50.0	1	06/23/2021 05:48	WG1692269



Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	CC	0.250	2.00	1	06/21/2021 17:25	WG1692178
Beryllium, Total Recoverable	0.120	CC	0.120	2.00	1	06/21/2021 17:25	WG1692178
Antimony, Total Recoverable	0.754	CC	0.754	2.00	1	06/21/2021 17:25	WG1692178
Thallium, Total Recoverable	0.190	CC	0.190	2.00	1	06/21/2021 17:25	WG1692178

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	CC	0.120	0.500	1	06/14/2021 03:42	WG1687409
1,1,1-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 03:42	WG1687409
1,1,2,2-Tetrachloroethane	0.130	CC	0.130	0.500	1	06/14/2021 03:42	WG1687409
1,1,2-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/14/2021 03:42	WG1687409
1,1-Dichloroethane	0.114	CC	0.114	0.500	1	06/14/2021 03:42	WG1687409
1,1-Dichloroethene	0.188	CC	0.188	0.500	1	06/14/2021 03:42	WG1687409
1,2,3-Trichloropropane	0.247	CC	0.247	2.50	1	06/14/2021 03:42	WG1687409
1,2-Dichlorobenzene	0.101	CC	0.101	0.500	1	06/14/2021 03:42	WG1687409
1,2-Dichloroethane	0.108	CC	0.108	0.500	1	06/14/2021 03:42	WG1687409
1,2-Dichloropropane	0.190	CC	0.190	0.500	1	06/14/2021 03:42	WG1687409
1,4-Dichlorobenzene	0.121	CC	0.121	0.500	1	06/14/2021 03:42	WG1687409
2-Butanone (MEK)	1.28	CC	1.28	5.00	1	06/14/2021 03:42	WG1687409
2-Hexanone	0.757	CC	0.757	5.00	1	06/14/2021 03:42	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	CC	0.823	5.00	1	06/14/2021 03:42	WG1687409
Acetone	1.41	CC	1.05	25.0	1	06/17/2021 04:05	WG1689128
Acrylonitrile	0.873	CC	0.873	5.00	1	06/14/2021 03:42	WG1687409
Benzene	0.0896	CC	0.0896	0.500	1	06/14/2021 03:42	WG1687409
Bromochloromethane	0.145	CC	0.145	0.500	1	06/14/2021 03:42	WG1687409
Bromodichloromethane	0.0800	CC	0.0800	0.500	1	06/14/2021 03:42	WG1687409
Bromoform	0.186	CC	0.186	0.500	1	06/14/2021 03:42	WG1687409
Bromomethane	0.157	CC	0.157	2.50	1	06/14/2021 03:42	WG1687409
Carbon disulfide	0.101	CC	0.101	0.500	1	06/14/2021 03:42	WG1687409
Carbon tetrachloride	0.159	CC	0.159	0.500	1	06/14/2021 03:42	WG1687409
Chlorobenzene	0.140	CC	0.140	0.500	1	06/14/2021 03:42	WG1687409
Chloroethane	0.141	CC	0.141	2.50	1	06/14/2021 03:42	WG1687409
Chloroform	0.0950	CC	0.0860	0.500	1	06/14/2021 03:42	WG1687409
Chloromethane	0.153	CC	0.153	1.25	1	06/14/2021 03:42	WG1687409
Dibromochloromethane	0.128	CC	0.128	0.500	1	06/14/2021 03:42	WG1687409
Dibromomethane	0.117	CC	0.117	0.500	1	06/14/2021 03:42	WG1687409
Ethylbenzene	0.158	CC	0.158	0.500	1	06/14/2021 03:42	WG1687409
Iodomethane	0.377	CC	0.377	10.0	1	06/14/2021 03:42	WG1687409
Methylene Chloride	1.07	CC	1.07	2.50	1	06/14/2021 03:42	WG1687409
Styrene	0.117	CC	0.117	0.500	1	06/14/2021 03:42	WG1687409
Tetrachloroethene	0.199	CC	0.199	0.500	1	06/14/2021 03:42	WG1687409
Toluene	0.412	CC	0.412	0.500	1	06/14/2021 03:42	WG1687409
Trichloroethene	0.153	CC	0.153	0.500	1	06/14/2021 03:42	WG1687409
Trichlorofluoromethane	0.130	CC	0.130	2.50	1	06/14/2021 03:42	WG1687409
Vinyl acetate	0.645	CC	0.645	5.00	1	06/14/2021 03:42	WG1687409
Vinyl chloride	0.118	CC	0.118	0.500	1	06/14/2021 03:42	WG1687409
Xylenes, Total	0.316	CC	0.316	1.50	1	06/14/2021 03:42	WG1687409
cis-1,2-Dichloroethene	0.0933	CC	0.0933	0.500	1	06/14/2021 03:42	WG1687409
cis-1,3-Dichloropropene	0.0976	CC	0.0976	0.500	1	06/14/2021 03:42	WG1687409
trans-1,2-Dichloroethene	0.152	CC	0.152	0.500	1	06/14/2021 03:42	WG1687409
trans-1,3-Dichloropropene	0.222	CC	0.222	0.500	1	06/14/2021 03:42	WG1687409
trans-1,4-Dichloro-2-butene	0.257	CC	0.257	5.00	1	06/17/2021 04:05	WG1689128
(S) 4-Bromofluorobenzene	100			77.0-126		06/14/2021 03:42	WG1687409
(S) 4-Bromofluorobenzene	87.4			77.0-126		06/17/2021 04:05	WG1689128
(S) Toluene-d8	103			80.0-120		06/14/2021 03:42	WG1687409



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	104			80.0-120		06/17/2021 04:05	WG1689128
(S) 1,2-Dichloroethane-d4	102			70.0-130		06/14/2021 03:42	WG1687409
(S) 1,2-Dichloroethane-d4	120			70.0-130		06/17/2021 04:05	WG1689128

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200	1	06/11/2021 23:20	WG1686010
Ethylene Dibromide	0.00240	U	0.00240	0.0100	1	06/11/2021 23:20	WG1686010

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	Z	

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1,2-Tetrachloroethane	0.120	U	0.120	0.500	1	06/13/2021 21:40	WG1687409
1,1,1-Trichloroethane	0.0940	U	0.0940	0.500	1	06/13/2021 21:40	WG1687409
1,1,2,2-Tetrachloroethane	0.130	U	0.130	0.500	1	06/13/2021 21:40	WG1687409
1,1,2-Trichloroethane	0.0940	U	0.0940	0.500	1	06/13/2021 21:40	WG1687409
1,1-Dichloroethane	0.114	U	0.114	0.500	1	06/13/2021 21:40	WG1687409
1,1-Dichloroethene	0.188	U	0.188	0.500	1	06/13/2021 21:40	WG1687409
1,2,3-Trichloropropane	0.247	U	0.247	2.50	1	06/13/2021 21:40	WG1687409
1,2-Dichlorobenzene	0.101	U	0.101	0.500	1	06/13/2021 21:40	WG1687409
1,2-Dichloroethane	0.108	U	0.108	0.500	1	06/13/2021 21:40	WG1687409
1,2-Dichloropropane	0.190	U	0.190	0.500	1	06/13/2021 21:40	WG1687409
1,4-Dichlorobenzene	0.121	U	0.121	0.500	1	06/13/2021 21:40	WG1687409
2-Butanone (MEK)	1.28	U	1.28	5.00	1	06/13/2021 21:40	WG1687409
2-Hexanone	0.757	U	0.757	5.00	1	06/13/2021 21:40	WG1687409
4-Methyl-2-pentanone (MIBK)	0.823	U	0.823	5.00	1	06/13/2021 21:40	WG1687409
Acetone	1.05	U	1.05	25.0	1	06/17/2021 04:25	WG1689128
Acrylonitrile	0.873	U	0.873	5.00	1	06/13/2021 21:40	WG1687409
Benzene	0.0896	U	0.0896	0.500	1	06/13/2021 21:40	WG1687409
Bromochloromethane	0.145	U	0.145	0.500	1	06/13/2021 21:40	WG1687409
Bromodichloromethane	0.0800	U	0.0800	0.500	1	06/13/2021 21:40	WG1687409
Bromoform	0.186	U	0.186	0.500	1	06/13/2021 21:40	WG1687409
Bromomethane	0.157	U	0.157	2.50	1	06/13/2021 21:40	WG1687409
Carbon disulfide	0.101	U	0.101	0.500	1	06/13/2021 21:40	WG1687409
Carbon tetrachloride	0.159	U	0.159	0.500	1	06/13/2021 21:40	WG1687409
Chlorobenzene	0.140	U	0.140	0.500	1	06/13/2021 21:40	WG1687409
Chloroethane	0.141	U	0.141	2.50	1	06/13/2021 21:40	WG1687409
Chloroform	0.0860	U	0.0860	0.500	1	06/13/2021 21:40	WG1687409
Chloromethane	0.153	U	0.153	1.25	1	06/13/2021 21:40	WG1687409
Dibromochloromethane	0.128	U	0.128	0.500	1	06/13/2021 21:40	WG1687409
Dibromomethane	0.117	U	0.117	0.500	1	06/13/2021 21:40	WG1687409
Ethylbenzene	0.158	U	0.158	0.500	1	06/13/2021 21:40	WG1687409
Iodomethane	0.377	U	0.377	10.0	1	06/13/2021 21:40	WG1687409
Methylene Chloride	1.07	U	1.07	2.50	1	06/13/2021 21:40	WG1687409
Styrene	0.117	U	0.117	0.500	1	06/13/2021 21:40	WG1687409
Tetrachloroethene	0.199	U	0.199	0.500	1	06/13/2021 21:40	WG1687409
Toluene	0.412	U	0.412	0.500	1	06/13/2021 21:40	WG1687409
Trichloroethene	0.153	U	0.153	0.500	1	06/13/2021 21:40	WG1687409
Trichlorofluoromethane	0.130	U	0.130	2.50	1	06/13/2021 21:40	WG1687409
Vinyl acetate	0.645	U	0.645	5.00	1	06/13/2021 21:40	WG1687409
Vinyl chloride	0.118	U	0.118	0.500	1	06/13/2021 21:40	WG1687409
Xylenes, Total	0.316	U	0.316	1.50	1	06/13/2021 21:40	WG1687409
cis-1,2-Dichloroethene	0.0933	U	0.0933	0.500	1	06/13/2021 21:40	WG1687409
cis-1,3-Dichloropropene	0.0976	U	0.0976	0.500	1	06/13/2021 21:40	WG1687409
trans-1,2-Dichloroethene	0.152	U	0.152	0.500	1	06/13/2021 21:40	WG1687409
trans-1,3-Dichloropropene	0.222	U	0.222	0.500	1	06/13/2021 21:40	WG1687409
trans-1,4-Dichloro-2-butene	0.257	U	0.257	5.00	1	06/17/2021 04:25	WG1689128
(S) 4-Bromofluorobenzene	99.6			77.0-126		06/13/2021 21:40	WG1687409
(S) 4-Bromofluorobenzene	85.8			77.0-126		06/17/2021 04:25	WG1689128
(S) Toluene-d8	104			80.0-120		06/13/2021 21:40	WG1687409
(S) Toluene-d8	101			80.0-120		06/17/2021 04:25	WG1689128
(S) 1,2-Dichloroethane-d4	99.3			70.0-130		06/13/2021 21:40	WG1687409

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 1,2-Dichloroethane-d4	120			70.0-130		06/17/2021 04:25	WG1689128

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	149		2.71	20.0	1	06/14/2021 07:46	WG1687935

Sample Narrative:

L1362888-11 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	18.0	I V	2.71	20.0	1	06/14/2021 07:53	WG1687935

Sample Narrative:

L1362888-12 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	8.78	I V	2.71	20.0	1	06/14/2021 08:01	WG1687935

Sample Narrative:

L1362888-13 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	4.64	I V	2.71	20.0	1	06/14/2021 08:09	WG1687935

Sample Narrative:

L1362888-14 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	96.3		2.71	20.0	1	06/14/2021 08:16	WG1687935

Sample Narrative:

L1362888-15 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	21.9	V	2.71	20.0	1	06/14/2021 08:25	WG1687935

Sample Narrative:

L1362888-16 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	131		2.71	20.0	1	06/14/2021 08:33	WG1687935

Sample Narrative:

L1362888-17 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	16.2	I V	2.71	20.0	1	06/14/2021 08:54	WG1687935

Sample Narrative:

L1362888-18 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	7.35	IV	2.71	20.0	1	06/14/2021 09:05	WG1687935

Sample Narrative:

L1362888-19 WG1687935: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	52.69	ft
pH (On Site)	4.99	su
Temperature (on-site)	28.7	Deg. C
Specific Conductance (on site)	29	umhos/cm
Dissolved Oxygen (on-site)	.9	mg/l
Turbidity (on-site)	1.91	NTU
eH/ORP (On Site)	234	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	21.0		10.0	1	06/10/2021 20:04	WG1686523

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	1.86		0.0519	1.00	1	06/09/2021 15:31	WG1685416
Nitrate as (N)	0.416		0.0227	0.100	1	06/09/2021 15:31	WG1685416

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100	1	06/23/2021 14:48	WG1692603

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0490	<u>U</u>	0.0490	0.200	1	06/16/2021 18:41	WG1685935

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	2.24	<u>V</u>	0.0111	1.00	1	06/23/2021 05:51	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	<u>U</u>	2.80	5.00	1	06/23/2021 05:51	WG1692269
Barium, Total Recoverable	10.2		1.70	5.00	1	06/23/2021 05:51	WG1692269
Cadmium, Total Recoverable	0.700	<u>U</u>	0.700	2.00	1	06/23/2021 05:51	WG1692269
Cobalt, Total Recoverable	2.30	<u>U</u>	2.30	10.0	1	06/23/2021 05:51	WG1692269
Chromium, Total Recoverable	2.57	<u>I</u>	1.40	10.0	1	06/23/2021 05:51	WG1692269
Copper, Total Recoverable	5.30	<u>U</u>	5.30	10.0	1	06/23/2021 05:51	WG1692269
Iron, Total Recoverable	181		14.1	100	1	06/23/2021 05:51	WG1692269
Nickel, Total Recoverable	4.90	<u>U</u>	4.90	10.0	1	06/23/2021 05:51	WG1692269
Lead, Total Recoverable	1.90	<u>U</u>	1.90	5.00	1	06/23/2021 05:51	WG1692269
Selenium, Total Recoverable	7.40	<u>U</u>	7.40	10.0	1	06/23/2021 05:51	WG1692269
Vanadium, Total Recoverable	2.40	<u>U</u>	2.40	20.0	1	06/23/2021 05:51	WG1692269
Zinc, Total Recoverable	5.90	<u>U</u>	5.90	50.0	1	06/23/2021 05:51	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	J	0.250	2.00	1	06/24/2021 16:40	WG1692266
Beryllium, Total Recoverable	0.120	J	0.120	2.00	1	06/24/2021 16:40	WG1692266
Antimony, Total Recoverable	0.754	J	0.754	2.00	1	06/24/2021 16:40	WG1692266
Thallium, Total Recoverable	0.190	J	0.190	2.00	1	06/24/2021 16:40	WG1692266

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	J	0.120	0.500	1	06/15/2021 11:59	WG1688503
1,1,1-Trichloroethane	0.0940	J	0.0940	0.500	1	06/15/2021 11:59	WG1688503
1,1,2,2-Tetrachloroethane	0.130	J	0.130	0.500	1	06/15/2021 11:59	WG1688503
1,1,2-Trichloroethane	0.0940	J	0.0940	0.500	1	06/15/2021 11:59	WG1688503
1,1-Dichloroethane	0.114	J	0.114	0.500	1	06/15/2021 11:59	WG1688503
1,1-Dichloroethene	0.188	J	0.188	0.500	1	06/15/2021 11:59	WG1688503
1,2,3-Trichloropropane	0.247	J	0.247	2.50	1	06/15/2021 11:59	WG1688503
1,2-Dichlorobenzene	0.101	J	0.101	0.500	1	06/15/2021 11:59	WG1688503
1,2-Dichloroethane	0.108	J	0.108	0.500	1	06/15/2021 11:59	WG1688503
1,2-Dichloropropane	0.190	J	0.190	0.500	1	06/15/2021 11:59	WG1688503
1,4-Dichlorobenzene	0.121	J	0.121	0.500	1	06/15/2021 11:59	WG1688503
2-Butanone (MEK)	1.28	J	1.28	5.00	1	06/15/2021 11:59	WG1688503
2-Hexanone	0.757	J	0.757	5.00	1	06/15/2021 11:59	WG1688503
4-Methyl-2-pentanone (MIBK)	0.823	J	0.823	5.00	1	06/15/2021 11:59	WG1688503
Acetone	1.05	J	1.05	25.0	1	06/15/2021 11:59	WG1688503
Acrylonitrile	0.873	J	0.873	5.00	1	06/15/2021 11:59	WG1688503
Benzene	0.0896	J	0.0896	0.500	1	06/15/2021 11:59	WG1688503
Bromochloromethane	0.145	J	0.145	0.500	1	06/15/2021 11:59	WG1688503
Bromodichloromethane	0.0800	J	0.0800	0.500	1	06/15/2021 11:59	WG1688503
Bromoform	0.186	J	0.186	0.500	1	06/15/2021 11:59	WG1688503
Bromomethane	0.157	J	0.157	2.50	1	06/15/2021 11:59	WG1688503
Carbon disulfide	0.101	J	0.101	0.500	1	06/15/2021 11:59	WG1688503
Carbon tetrachloride	0.159	J	0.159	0.500	1	06/15/2021 11:59	WG1688503
Chlorobenzene	0.140	J	0.140	0.500	1	06/15/2021 11:59	WG1688503
Chloroethane	0.141	J	0.141	2.50	1	06/15/2021 11:59	WG1688503
Chloroform	0.0860	J	0.0860	0.500	1	06/15/2021 11:59	WG1688503
Chloromethane	0.153	J	0.153	1.25	1	06/15/2021 11:59	WG1688503
Dibromochloromethane	0.128	J	0.128	0.500	1	06/15/2021 11:59	WG1688503
Dibromomethane	0.117	J	0.117	0.500	1	06/15/2021 11:59	WG1688503
Ethylbenzene	0.158	J	0.158	0.500	1	06/15/2021 11:59	WG1688503
Iodomethane	0.377	J	0.377	10.0	1	06/15/2021 11:59	WG1688503
Methylene Chloride	1.07	J	1.07	2.50	1	06/15/2021 11:59	WG1688503
Styrene	0.117	J	0.117	0.500	1	06/15/2021 11:59	WG1688503
Tetrachloroethene	0.199	J	0.199	0.500	1	06/15/2021 11:59	WG1688503
Toluene	0.412	J	0.412	0.500	1	06/15/2021 11:59	WG1688503
Trichloroethene	0.153	J	0.153	0.500	1	06/15/2021 11:59	WG1688503
Trichlorofluoromethane	0.130	J	0.130	2.50	1	06/15/2021 11:59	WG1688503
Vinyl acetate	0.645	J	0.645	5.00	1	06/15/2021 11:59	WG1688503
Vinyl chloride	0.118	J	0.118	0.500	1	06/15/2021 11:59	WG1688503
Xylenes, Total	0.316	J	0.316	1.50	1	06/15/2021 11:59	WG1688503
cis-1,2-Dichloroethene	0.0933	J	0.0933	0.500	1	06/15/2021 11:59	WG1688503
cis-1,3-Dichloropropene	0.0976	J	0.0976	0.500	1	06/15/2021 11:59	WG1688503
trans-1,2-Dichloroethene	0.152	J	0.152	0.500	1	06/15/2021 11:59	WG1688503
trans-1,3-Dichloropropene	0.222	J	0.222	0.500	1	06/15/2021 11:59	WG1688503
trans-1,4-Dichloro-2-butene	0.257	J	0.257	5.00	1	06/15/2021 11:59	WG1688503
(S) 4-Bromofluorobenzene	96.6			77.0-126		06/15/2021 11:59	WG1688503
(S) Toluene-d8	102			80.0-120		06/15/2021 11:59	WG1688503
(S) 1,2-Dichloroethane-d4	106			70.0-130		06/15/2021 11:59	WG1688503



EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	<u>U</u>	0.00430	0.0200	1	06/11/2021 23:32	WG1686010
Ethylene Dibromide	0.00240	<u>U</u>	0.00240	0.0100	1	06/11/2021 23:32	WG1686010

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	51.71	ft
pH (On Site)	5.12	su
Temperature (on-site)	27.7	Deg. C
Specific Conductance (on site)	302	umhos/cm
Dissolved Oxygen (on-site)	2.2	mg/l
Turbidity (on-site)	.29	NTU
eH/ORP (On Site)	239	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	206		10.0	1	06/10/2021 20:04	WG1686523

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	46.7		0.0519	1.00	1	06/09/2021 16:03	WG1685416
Nitrate as (N)	6.23		0.0227	0.100	1	06/09/2021 16:03	WG1685416

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	U	0.0317	0.100	1	06/23/2021 14:49	WG1692603

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	3.35		0.0490	0.200	1	06/16/2021 18:53	WG1685935

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	16.1		0.0111	1.00	1	06/23/2021 05:54	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	U	2.80	5.00	1	06/23/2021 05:54	WG1692269
Barium, Total Recoverable	43.2		1.70	5.00	1	06/23/2021 05:54	WG1692269
Cadmium, Total Recoverable	0.700	U	0.700	2.00	1	06/23/2021 05:54	WG1692269
Cobalt, Total Recoverable	2.30	U	2.30	10.0	1	06/23/2021 05:54	WG1692269
Chromium, Total Recoverable	1.40	U	1.40	10.0	1	06/23/2021 05:54	WG1692269
Copper, Total Recoverable	5.30	U	5.30	10.0	1	06/23/2021 05:54	WG1692269
Iron, Total Recoverable	14.1	U	14.1	100	1	06/23/2021 05:54	WG1692269
Nickel, Total Recoverable	4.90	U	4.90	10.0	1	06/23/2021 05:54	WG1692269
Lead, Total Recoverable	1.90	U	1.90	5.00	1	06/23/2021 05:54	WG1692269
Selenium, Total Recoverable	7.40	U	7.40	10.0	1	06/23/2021 05:54	WG1692269
Vanadium, Total Recoverable	2.40	U	2.40	20.0	1	06/23/2021 05:54	WG1692269
Zinc, Total Recoverable	12.0	I	5.90	50.0	1	06/23/2021 05:54	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	CC	0.250	2.00	1	06/24/2021 16:43	WG1692266
Beryllium, Total Recoverable	0.120	CC	0.120	2.00	1	06/24/2021 16:43	WG1692266
Antimony, Total Recoverable	0.754	CC	0.754	2.00	1	06/24/2021 16:43	WG1692266
Thallium, Total Recoverable	0.190	CC	0.190	2.00	1	06/24/2021 16:43	WG1692266

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	CC	0.120	0.500	1	06/15/2021 12:20	WG1688503
1,1,1-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/15/2021 12:20	WG1688503
1,1,2,2-Tetrachloroethane	0.130	CC	0.130	0.500	1	06/15/2021 12:20	WG1688503
1,1,2-Trichloroethane	0.0940	CC	0.0940	0.500	1	06/15/2021 12:20	WG1688503
1,1-Dichloroethane	0.114	CC	0.114	0.500	1	06/15/2021 12:20	WG1688503
1,1-Dichloroethene	0.188	CC	0.188	0.500	1	06/15/2021 12:20	WG1688503
1,2,3-Trichloropropane	0.247	CC	0.247	2.50	1	06/15/2021 12:20	WG1688503
1,2-Dichlorobenzene	0.101	CC	0.101	0.500	1	06/15/2021 12:20	WG1688503
1,2-Dichloroethane	0.108	CC	0.108	0.500	1	06/15/2021 12:20	WG1688503
1,2-Dichloropropane	0.190	CC	0.190	0.500	1	06/15/2021 12:20	WG1688503
1,4-Dichlorobenzene	0.121	CC	0.121	0.500	1	06/15/2021 12:20	WG1688503
2-Butanone (MEK)	1.28	CC	1.28	5.00	1	06/15/2021 12:20	WG1688503
2-Hexanone	0.757	CC	0.757	5.00	1	06/15/2021 12:20	WG1688503
4-Methyl-2-pentanone (MIBK)	0.823	CC	0.823	5.00	1	06/15/2021 12:20	WG1688503
Acetone	1.05	CC	1.05	25.0	1	06/15/2021 12:20	WG1688503
Acrylonitrile	0.873	CC	0.873	5.00	1	06/15/2021 12:20	WG1688503
Benzene	0.0896	CC	0.0896	0.500	1	06/15/2021 12:20	WG1688503
Bromochloromethane	0.145	CC	0.145	0.500	1	06/15/2021 12:20	WG1688503
Bromodichloromethane	0.0800	CC	0.0800	0.500	1	06/15/2021 12:20	WG1688503
Bromoform	0.186	CC	0.186	0.500	1	06/15/2021 12:20	WG1688503
Bromomethane	0.157	CC	0.157	2.50	1	06/15/2021 12:20	WG1688503
Carbon disulfide	0.101	CC	0.101	0.500	1	06/15/2021 12:20	WG1688503
Carbon tetrachloride	0.159	CC	0.159	0.500	1	06/15/2021 12:20	WG1688503
Chlorobenzene	0.140	CC	0.140	0.500	1	06/15/2021 12:20	WG1688503
Chloroethane	0.141	CC	0.141	2.50	1	06/15/2021 12:20	WG1688503
Chloroform	0.189	CC	0.0860	0.500	1	06/15/2021 12:20	WG1688503
Chloromethane	0.153	CC	0.153	1.25	1	06/15/2021 12:20	WG1688503
Dibromochloromethane	0.128	CC	0.128	0.500	1	06/15/2021 12:20	WG1688503
Dibromomethane	0.117	CC	0.117	0.500	1	06/15/2021 12:20	WG1688503
Ethylbenzene	0.158	CC	0.158	0.500	1	06/15/2021 12:20	WG1688503
Iodomethane	0.377	CC	0.377	10.0	1	06/15/2021 12:20	WG1688503
Methylene Chloride	1.07	CC	1.07	2.50	1	06/15/2021 12:20	WG1688503
Styrene	0.117	CC	0.117	0.500	1	06/15/2021 12:20	WG1688503
Tetrachloroethene	0.199	CC	0.199	0.500	1	06/15/2021 12:20	WG1688503
Toluene	0.412	CC	0.412	0.500	1	06/15/2021 12:20	WG1688503
Trichloroethene	0.153	CC	0.153	0.500	1	06/15/2021 12:20	WG1688503
Trichlorofluoromethane	0.130	CC	0.130	2.50	1	06/15/2021 12:20	WG1688503
Vinyl acetate	0.645	CC	0.645	5.00	1	06/15/2021 12:20	WG1688503
Vinyl chloride	0.118	CC	0.118	0.500	1	06/15/2021 12:20	WG1688503
Xylenes, Total	0.316	CC	0.316	1.50	1	06/15/2021 12:20	WG1688503
cis-1,2-Dichloroethene	0.0933	CC	0.0933	0.500	1	06/15/2021 12:20	WG1688503
cis-1,3-Dichloropropene	0.0976	CC	0.0976	0.500	1	06/15/2021 12:20	WG1688503
trans-1,2-Dichloroethene	0.152	CC	0.152	0.500	1	06/15/2021 12:20	WG1688503
trans-1,3-Dichloropropene	0.222	CC	0.222	0.500	1	06/15/2021 12:20	WG1688503
trans-1,4-Dichloro-2-butene	0.257	CC	0.257	5.00	1	06/15/2021 12:20	WG1688503
(S) 4-Bromofluorobenzene	94.6			77.0-126		06/15/2021 12:20	WG1688503
(S) Toluene-d8	102			80.0-120		06/15/2021 12:20	WG1688503
(S) 1,2-Dichloroethane-d4	108			70.0-130		06/15/2021 12:20	WG1688503



EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	<u>U</u>	0.00430	0.0200	1	06/11/2021 23:44	WG1686010
Ethylene Dibromide	0.00240	<u>U</u>	0.00240	0.0100	1	06/11/2021 23:44	WG1686010

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	BP	
Groundwater Elevation	53.69	ft
pH (On Site)	6.63	su
Temperature (on-site)	27.4	Deg. C
Specific Conductance (on site)	288	umhos/cm
Dissolved Oxygen (on-site)	.8	mg/l
Turbidity (on-site)	4.49	NTU
eH/ORP (On Site)	223	mV

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	159		10.0	1	06/10/2021 20:04	WG1686523

Wet Chemistry by Method 300.0

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14.2		0.0519	1.00	1	06/09/2021 16:52	WG1685416
Nitrate as (N)	4.65		0.0227	0.100	1	06/09/2021 16:52	WG1685416

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100	1	06/23/2021 14:53	WG1692603

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.0490	<u>U</u>	0.0490	0.200	1	06/16/2021 18:55	WG1685935

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	6.78		0.0111	1.00	1	06/23/2021 05:56	WG1692269
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	<u>U</u>	2.80	5.00	1	06/23/2021 05:56	WG1692269
Barium, Total Recoverable	23.5		1.70	5.00	1	06/23/2021 05:56	WG1692269
Cadmium, Total Recoverable	0.700	<u>U</u>	0.700	2.00	1	06/23/2021 05:56	WG1692269
Cobalt, Total Recoverable	2.30	<u>U</u>	2.30	10.0	1	06/23/2021 05:56	WG1692269
Chromium, Total Recoverable	1.40	<u>U</u>	1.40	10.0	1	06/23/2021 05:56	WG1692269
Copper, Total Recoverable	5.30	<u>U</u>	5.30	10.0	1	06/23/2021 05:56	WG1692269
Iron, Total Recoverable	19.4	<u>I</u>	14.1	100	1	06/23/2021 05:56	WG1692269
Nickel, Total Recoverable	4.90	<u>U</u>	4.90	10.0	1	06/23/2021 05:56	WG1692269
Lead, Total Recoverable	1.90	<u>U</u>	1.90	5.00	1	06/23/2021 05:56	WG1692269
Selenium, Total Recoverable	7.40	<u>U</u>	7.40	10.0	1	06/23/2021 05:56	WG1692269
Vanadium, Total Recoverable	2.85	<u>I</u>	2.40	20.0	1	06/23/2021 05:56	WG1692269
Zinc, Total Recoverable	8.17	<u>I</u>	5.90	50.0	1	06/23/2021 05:56	WG1692269

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	1.19	1	0.250	2.00	1	06/24/2021 16:47	WG1692266
Beryllium, Total Recoverable	0.120	1	0.120	2.00	1	06/24/2021 16:47	WG1692266
Antimony, Total Recoverable	0.754	1	0.754	2.00	1	06/24/2021 16:47	WG1692266
Thallium, Total Recoverable	0.190	1	0.190	2.00	1	06/24/2021 16:47	WG1692266

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1,2-Tetrachloroethane	0.120	1	0.120	0.500	1	06/15/2021 12:41	WG1688503
1,1,1-Trichloroethane	0.0940	1	0.0940	0.500	1	06/15/2021 12:41	WG1688503
1,1,2,2-Tetrachloroethane	0.130	1	0.130	0.500	1	06/15/2021 12:41	WG1688503
1,1,2-Trichloroethane	0.0940	1	0.0940	0.500	1	06/15/2021 12:41	WG1688503
1,1-Dichloroethane	0.114	1	0.114	0.500	1	06/15/2021 12:41	WG1688503
1,1-Dichloroethene	0.188	1	0.188	0.500	1	06/15/2021 12:41	WG1688503
1,2,3-Trichloropropane	0.247	1	0.247	2.50	1	06/15/2021 12:41	WG1688503
1,2-Dichlorobenzene	0.101	1	0.101	0.500	1	06/15/2021 12:41	WG1688503
1,2-Dichloroethane	0.108	1	0.108	0.500	1	06/15/2021 12:41	WG1688503
1,2-Dichloropropane	0.190	1	0.190	0.500	1	06/15/2021 12:41	WG1688503
1,4-Dichlorobenzene	0.121	1	0.121	0.500	1	06/15/2021 12:41	WG1688503
2-Butanone (MEK)	1.28	1	1.28	5.00	1	06/15/2021 12:41	WG1688503
2-Hexanone	0.757	1	0.757	5.00	1	06/15/2021 12:41	WG1688503
4-Methyl-2-pentanone (MIBK)	0.823	1	0.823	5.00	1	06/15/2021 12:41	WG1688503
Acetone	1.05	1	1.05	25.0	1	06/15/2021 12:41	WG1688503
Acrylonitrile	0.873	1	0.873	5.00	1	06/15/2021 12:41	WG1688503
Benzene	0.0896	1	0.0896	0.500	1	06/15/2021 12:41	WG1688503
Bromochloromethane	0.145	1	0.145	0.500	1	06/15/2021 12:41	WG1688503
Bromodichloromethane	0.0800	1	0.0800	0.500	1	06/15/2021 12:41	WG1688503
Bromoform	0.186	1	0.186	0.500	1	06/15/2021 12:41	WG1688503
Bromomethane	0.157	1	0.157	2.50	1	06/15/2021 12:41	WG1688503
Carbon disulfide	0.101	1	0.101	0.500	1	06/15/2021 12:41	WG1688503
Carbon tetrachloride	0.159	1	0.159	0.500	1	06/15/2021 12:41	WG1688503
Chlorobenzene	0.140	1	0.140	0.500	1	06/15/2021 12:41	WG1688503
Chloroethane	0.141	1	0.141	2.50	1	06/15/2021 12:41	WG1688503
Chloroform	0.0860	1	0.0860	0.500	1	06/15/2021 12:41	WG1688503
Chloromethane	0.153	1	0.153	1.25	1	06/15/2021 12:41	WG1688503
Dibromochloromethane	0.128	1	0.128	0.500	1	06/15/2021 12:41	WG1688503
Dibromomethane	0.117	1	0.117	0.500	1	06/15/2021 12:41	WG1688503
Ethylbenzene	0.158	1	0.158	0.500	1	06/15/2021 12:41	WG1688503
Iodomethane	0.377	1	0.377	10.0	1	06/15/2021 12:41	WG1688503
Methylene Chloride	1.07	1	1.07	2.50	1	06/15/2021 12:41	WG1688503
Styrene	0.117	1	0.117	0.500	1	06/15/2021 12:41	WG1688503
Tetrachloroethene	0.199	1	0.199	0.500	1	06/15/2021 12:41	WG1688503
Toluene	0.412	1	0.412	0.500	1	06/15/2021 12:41	WG1688503
Trichloroethene	0.153	1	0.153	0.500	1	06/15/2021 12:41	WG1688503
Trichlorofluoromethane	0.130	1	0.130	2.50	1	06/15/2021 12:41	WG1688503
Vinyl acetate	0.645	1	0.645	5.00	1	06/15/2021 12:41	WG1688503
Vinyl chloride	0.118	1	0.118	0.500	1	06/15/2021 12:41	WG1688503
Xylenes, Total	0.316	1	0.316	1.50	1	06/15/2021 12:41	WG1688503
cis-1,2-Dichloroethene	0.0933	1	0.0933	0.500	1	06/15/2021 12:41	WG1688503
cis-1,3-Dichloropropene	0.0976	1	0.0976	0.500	1	06/15/2021 12:41	WG1688503
trans-1,2-Dichloroethene	0.152	1	0.152	0.500	1	06/15/2021 12:41	WG1688503
trans-1,3-Dichloropropene	0.222	1	0.222	0.500	1	06/15/2021 12:41	WG1688503
trans-1,4-Dichloro-2-butene	0.257	1	0.257	5.00	1	06/15/2021 12:41	WG1688503
(S) 4-Bromofluorobenzene	96.0			77.0-126		06/15/2021 12:41	WG1688503
(S) Toluene-d8	104			80.0-120		06/15/2021 12:41	WG1688503
(S) 1,2-Dichloroethane-d4	105			70.0-130		06/15/2021 12:41	WG1688503



EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	<u>U</u>	0.00430	0.0200	1	06/11/2021 23:56	WG1686010
Ethylene Dibromide	0.00240	<u>U</u>	0.00240	0.0100	1	06/11/2021 23:56	WG1686010

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Additional Information - Results for field analyses are not accredited to ISO 17025

Analyte	Result	Units
Sampling Method	Z	

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1,2-Tetrachloroethane	0.120	C	0.120	0.500	1	06/15/2021 00:59	WG1688518
1,1,1-Trichloroethane	0.0940	C	0.0940	0.500	1	06/15/2021 00:59	WG1688518
1,1,2,2-Tetrachloroethane	0.130	C	0.130	0.500	1	06/15/2021 00:59	WG1688518
1,1,2-Trichloroethane	0.0940	C	0.0940	0.500	1	06/15/2021 00:59	WG1688518
1,1-Dichloroethane	0.114	C	0.114	0.500	1	06/15/2021 00:59	WG1688518
1,1-Dichloroethene	0.188	C	0.188	0.500	1	06/15/2021 00:59	WG1688518
1,2,3-Trichloropropane	0.247	C	0.247	2.50	1	06/15/2021 00:59	WG1688518
1,2-Dichlorobenzene	0.101	C	0.101	0.500	1	06/15/2021 00:59	WG1688518
1,2-Dichloroethane	0.108	C	0.108	0.500	1	06/15/2021 00:59	WG1688518
1,2-Dichloropropane	0.190	C	0.190	0.500	1	06/15/2021 00:59	WG1688518
1,4-Dichlorobenzene	0.121	C	0.121	0.500	1	06/15/2021 00:59	WG1688518
2-Butanone (MEK)	1.28	C	1.28	5.00	1	06/15/2021 00:59	WG1688518
2-Hexanone	0.757	C	0.757	5.00	1	06/15/2021 00:59	WG1688518
4-Methyl-2-pentanone (MIBK)	0.823	C	0.823	5.00	1	06/15/2021 00:59	WG1688518
Acetone	1.05	C	1.05	25.0	1	06/15/2021 00:59	WG1688518
Acrylonitrile	0.873	C	0.873	5.00	1	06/15/2021 00:59	WG1688518
Benzene	0.0896	C	0.0896	0.500	1	06/15/2021 00:59	WG1688518
Bromochloromethane	0.145	C	0.145	0.500	1	06/15/2021 00:59	WG1688518
Bromodichloromethane	0.0800	C	0.0800	0.500	1	06/15/2021 00:59	WG1688518
Bromoform	0.186	C	0.186	0.500	1	06/15/2021 00:59	WG1688518
Bromomethane	0.157	C	0.157	2.50	1	06/15/2021 00:59	WG1688518
Carbon disulfide	0.101	C	0.101	0.500	1	06/15/2021 00:59	WG1688518
Carbon tetrachloride	0.159	C	0.159	0.500	1	06/15/2021 00:59	WG1688518
Chlorobenzene	0.140	C	0.140	0.500	1	06/15/2021 00:59	WG1688518
Chloroethane	0.141	C	0.141	2.50	1	06/15/2021 00:59	WG1688518
Chloroform	0.0860	C	0.0860	0.500	1	06/15/2021 00:59	WG1688518
Chloromethane	0.153	C	0.153	1.25	1	06/15/2021 00:59	WG1688518
Dibromochloromethane	0.128	C	0.128	0.500	1	06/15/2021 00:59	WG1688518
Dibromomethane	0.117	C	0.117	0.500	1	06/15/2021 00:59	WG1688518
Ethylbenzene	0.158	C	0.158	0.500	1	06/15/2021 00:59	WG1688518
Iodomethane	0.377	C	0.377	10.0	1	06/15/2021 00:59	WG1688518
Methylene Chloride	1.07	C	1.07	2.50	1	06/15/2021 00:59	WG1688518
Styrene	0.117	C	0.117	0.500	1	06/15/2021 00:59	WG1688518
Tetrachloroethene	0.199	C	0.199	0.500	1	06/15/2021 00:59	WG1688518
Toluene	0.412	C	0.412	0.500	1	06/15/2021 00:59	WG1688518
Trichloroethene	0.153	C	0.153	0.500	1	06/15/2021 00:59	WG1688518
Trichlorofluoromethane	0.130	C	0.130	2.50	1	06/15/2021 00:59	WG1688518
Vinyl acetate	0.645	C	0.645	5.00	1	06/15/2021 00:59	WG1688518
Vinyl chloride	0.118	C	0.118	0.500	1	06/15/2021 00:59	WG1688518
Xylenes, Total	0.316	C	0.316	1.50	1	06/15/2021 00:59	WG1688518
cis-1,2-Dichloroethene	0.0933	C	0.0933	0.500	1	06/15/2021 00:59	WG1688518
cis-1,3-Dichloropropene	0.0976	C	0.0976	0.500	1	06/15/2021 00:59	WG1688518
trans-1,2-Dichloroethene	0.152	C	0.152	0.500	1	06/15/2021 00:59	WG1688518
trans-1,3-Dichloropropene	0.222	C	0.222	0.500	1	06/15/2021 00:59	WG1688518
trans-1,4-Dichloro-2-butene	0.257	C	0.257	5.00	1	06/15/2021 00:59	WG1688518
(S) 4-Bromofluorobenzene	96.5			77.0-126		06/15/2021 00:59	WG1688518
(S) Toluene-d8	103			80.0-120		06/15/2021 00:59	WG1688518
(S) 1,2-Dichloroethane-d4	111			70.0-130		06/15/2021 00:59	WG1688518

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Equipment Blank

Collected date/time: 06/08/21 08:30

SAMPLE RESULTS - 24

L1362888

Additional Information - Results for field analyses are not accredited to ISO 17025

	Result	Units
Analyte		
Sampling Method	Z	
pH (On Site)	6.87	su
Temperature (on-site)	21.3	Deg. C
Specific Conductance (on site)	6	umhos/cm
Dissolved Oxygen (on-site)	1	mg/l
Turbidity (on-site)	0	NTU
eH/ORP (On Site)	24	mV

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	12.0		10.0	1	06/10/2021 20:04	WG1686523

Wet Chemistry by Method 300.0

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Chloride	0.0519	U	0.0519	1.00	1	06/09/2021 17:09	WG1685416
Nitrate as (N)	0.0227	U	0.0227	0.100	1	06/09/2021 17:09	WG1685416

Wet Chemistry by Method 350.1

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Ammonia Nitrogen	0.0317	U	0.0317	0.100	1	06/23/2021 14:56	WG1692603

Mercury by Method 7470A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Mercury	0.0490	U	0.0490	0.200	1	06/16/2021 18:58	WG1685935

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Sodium, Total Recoverable	0.777	I V	0.0111	1.00	1	06/23/2021 05:59	WG1692269

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Silver, Total Recoverable	2.80	U	2.80	5.00	1	06/23/2021 05:59	WG1692269
Barium, Total Recoverable	1.70	U	1.70	5.00	1	06/23/2021 05:59	WG1692269
Cadmium, Total Recoverable	0.700	U	0.700	2.00	1	06/23/2021 05:59	WG1692269
Cobalt, Total Recoverable	2.30	U	2.30	10.0	1	06/23/2021 05:59	WG1692269
Chromium, Total Recoverable	1.40	U	1.40	10.0	1	06/23/2021 05:59	WG1692269
Copper, Total Recoverable	5.30	U	5.30	10.0	1	06/23/2021 05:59	WG1692269
Iron, Total Recoverable	14.1	U	14.1	100	1	06/23/2021 05:59	WG1692269
Nickel, Total Recoverable	4.90	U	4.90	10.0	1	06/23/2021 05:59	WG1692269
Lead, Total Recoverable	1.90	U	1.90	5.00	1	06/23/2021 05:59	WG1692269
Selenium, Total Recoverable	7.40	U	7.40	10.0	1	06/23/2021 05:59	WG1692269
Vanadium, Total Recoverable	2.40	U	2.40	20.0	1	06/23/2021 05:59	WG1692269
Zinc, Total Recoverable	5.90	U	5.90	50.0	1	06/23/2021 05:59	WG1692269

Equipment Blank

Collected date/time: 06/08/21 08:30

SAMPLE RESULTS - 24

L1362888

Metals (ICPMS) by Method 6020

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Arsenic, Total Recoverable	0.250	<u>U</u>	0.250	2.00	1	06/24/2021 16:50	WG1692266
Beryllium, Total Recoverable	0.120	<u>U</u>	0.120	2.00	1	06/24/2021 16:50	WG1692266
Antimony, Total Recoverable	0.754	<u>U</u>	0.754	2.00	1	06/24/2021 16:50	WG1692266
Thallium, Total Recoverable	0.190	<u>U</u>	0.190	2.00	1	06/24/2021 16:50	WG1692266

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	0.00430	<u>U</u>	0.00430	0.0200	1	06/12/2021 12:12	WG1686742
Ethylene Dibromide	0.00240	<u>U</u>	0.00240	0.0100	1	06/12/2021 12:12	WG1686742

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	3.29	IV	2.71	20.0	1	06/15/2021 01:26	WG1688521

Sample Narrative:

L1362888-25 WG1688521: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	16.1	I V	2.71	20.0	1	06/15/2021 01:35	WG1688521

Sample Narrative:

L1362888-26 WG1688521: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	94.0		2.71	20.0	1	06/15/2021 01:42	WG1688521

Sample Narrative:

L1362888-27 WG1688521: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Total Alkalinity	3.10	IV	2.71	20.0	1	06/15/2021 01:51	WG1688521

Sample Narrative:

L1362888-28 WG1688521: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3665841-1 06/08/21 19:35

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	2.82	<u>U</u>	2.82	10.0

L1362920-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1362920-03 06/08/21 19:35 • (DUP) R3665841-3 06/08/21 19:35

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	1020	1060	1	3.27		5

L1362920-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1362920-04 06/08/21 19:35 • (DUP) R3665841-4 06/08/21 19:35

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	559	604	1	7.80	<u>J</u>	5

Laboratory Control Sample (LCS)

(LCS) R3665841-2 06/08/21 19:35

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8590	97.6	77.4-123	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3666237-1 06/09/21 15:04

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	2.82	<u>U</u>	2.82	10.0

L1362811-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1362811-01 06/09/21 15:04 • (DUP) R3666237-3 06/09/21 15:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	622	628	1	0.960		5

L1362986-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1362986-01 06/09/21 15:04 • (DUP) R3666237-4 06/09/21 15:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	685	681	1	0.585		5

Laboratory Control Sample (LCS)

(LCS) R3666237-2 06/09/21 15:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8780	99.8	77.4-123	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3667094-1 06/10/21 20:04

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	2.82	<u>U</u>	2.82	10.0

L1363611-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1363611-03 06/10/21 20:04 • (DUP) R3667094-3 06/10/21 20:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	951	1000	1	5.32	<u>U</u>	5

L1363611-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1363611-04 06/10/21 20:04 • (DUP) R3667094-4 06/10/21 20:04

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	692	732	1	5.62	<u>U</u>	5

Laboratory Control Sample (LCS)

(LCS) R3667094-2 06/10/21 20:04

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8430	95.8	77.4-123	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3666851-1 06/14/21 05:41

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity	3.70		2.71	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1362920-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1362920-03 06/14/21 06:05 • (DUP) R3666851-2 06/14/21 06:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity	608	608	1	0.0898		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1362826-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1362826-04 06/14/21 07:09 • (DUP) R3666851-4 06/14/21 07:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity	150	147	1	2.33		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3666851-3 06/14/21 06:59

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Alkalinity	100	102	102	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5



Method Blank (MB)

(MB) R3667293-1 06/15/21 01:18

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity	2.86		2.71	20.0

Sample Narrative:
BLANK: Endpoint pH 4.5

L1363210-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1363210-04 06/15/21 01:59 • (DUP) R3667293-2 06/15/21 02:06

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity	676	674	1	0.344		20

Sample Narrative:
OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1363363-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1363363-01 06/15/21 03:56 • (DUP) R3667293-4 06/15/21 04:05

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity	15.7	20.5	1	26.2	⬇	20

Sample Narrative:
OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3667293-3 06/15/21 02:39

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Alkalinity	100	102	102	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3664955-1 06/08/21 10:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.0519	U	0.0519	1.00
Nitrate	0.0227	U	0.0227	0.100

L1362754-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1362754-01 06/08/21 12:29 • (DUP) R3664955-3 06/08/21 12:45

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	6.77	6.74	1	0.505		20
Nitrate	0.395	0.334	1	16.8		20

L1362888-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1362888-04 06/08/21 18:33 • (DUP) R3664955-6 06/08/21 18:49

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	10.3	10.3	1	0.0446		20
Nitrate	3.98	3.98	1	0.0503		20

Laboratory Control Sample (LCS)

(LCS) R3664955-2 06/08/21 11:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.6	102	90.0-110	
Nitrate	8.00	8.19	102	90.0-110	

L1362754-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1362754-01 06/08/21 12:29 • (MS) R3664955-4 06/08/21 13:02 • (MSD) R3664955-5 06/08/21 13:18

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	6.77	56.9	57.1	100	101	1	80.0-120			0.208	20
Nitrate	5.00	0.395	5.20	5.26	96.2	97.4	1	80.0-120			1.10	20



L1362888-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1362888-04 06/08/21 18:33 • (MS) R3664955-7 06/08/21 19:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Chloride	50.0	10.3	60.3	100	1	80.0-120	
Nitrate	5.00	3.98	9.03	101	1	80.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3665466-1 06/09/21 11:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.0519	U	0.0519	1.00
Nitrate	0.0227	U	0.0227	0.100

L1362888-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1362888-20 06/09/21 15:31 • (DUP) R3665466-3 06/09/21 15:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1.86	1.86	1	0.0322		20
Nitrate	0.416	0.416	1	0.0721		20

L1363737-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1363737-01 06/09/21 20:26 • (DUP) R3665466-6 06/09/21 20:42

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	38.6	38.5	1	0.200		20
Nitrate	0.627	0.622	1	0.881		20

Laboratory Control Sample (LCS)

(LCS) R3665466-2 06/09/21 11:29

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.7	102	90.0-110	
Nitrate	8.00	8.20	103	90.0-110	

L1362888-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1362888-21 06/09/21 16:03 • (MS) R3665466-4 06/09/21 16:19 • (MSD) R3665466-5 06/09/21 16:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	46.7	95.3	95.8	97.1	98.1	1	80.0-120			0.553	20
Nitrate	5.00	6.23	11.1	11.2	97.4	98.6	1	80.0-120	L	L	0.526	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L1363699-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1363699-01 06/09/21 21:31 • (MS) R3665466-7 06/09/21 21:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	498	524	51.4	1	80.0-120	⌋⌋
Nitrate	5.00	10.3	14.9	93.1	1	80.0-120	⌋

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3671029-1 06/23/21 14:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ammonia Nitrogen	0.0317	<u>U</u>	0.0317	0.100

L1362888-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1362888-02 06/23/21 14:28 • (DUP) R3671029-5 06/23/21 14:29

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	0.0317	0.0317	1	0.000	<u>U</u>	10

L1362888-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1362888-22 06/23/21 14:53 • (DUP) R3671029-7 06/23/21 14:54

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	0.0317	0.0317	1	0.000	<u>U</u>	10

Laboratory Control Sample (LCS)

(LCS) R3671029-2 06/23/21 14:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ammonia Nitrogen	7.50	7.89	105	90.0-110	

L1362888-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1362888-01 06/23/21 14:23 • (MS) R3671029-3 06/23/21 14:24 • (MSD) R3671029-4 06/23/21 14:26

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	5.00	0.0317	5.30	5.18	106	104	1	90.0-110			2.16	10

L1362888-21 Original Sample (OS) • Matrix Spike (MS)

(OS) L1362888-21 06/23/21 14:49 • (MS) R3671029-6 06/23/21 14:51

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ammonia Nitrogen	5.00	0.0317	5.23	105	1	90.0-110	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3665304-1 06/09/21 15:10

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Mercury	0.0490	<u>U</u>	0.0490	0.200

Laboratory Control Sample (LCS)

(LCS) R3665304-2 06/09/21 15:12

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Mercury	3.00	2.99	99.6	80.0-120	

L1362557-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1362557-21 06/09/21 15:14 • (MS) R3665304-3 06/09/21 15:16 • (MSD) R3665304-4 06/09/21 15:24

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury	3.00	0.0490	2.96	3.06	98.6	102	1	75.0-125			3.49	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3668240-1 06/16/21 18:36

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Mercury	0.0490	<u>U</u>	0.0490	0.200

Laboratory Control Sample (LCS)

(LCS) R3668240-2 06/16/21 18:38

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	ug/l	ug/l	%	%	
Mercury	3.00	2.95	98.2	80.0-120	

L1362888-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1362888-20 06/16/21 18:41 • (MS) R3668240-3 06/16/21 18:43 • (MSD) R3668240-4 06/16/21 18:46

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury	3.00	21.3	2.96	2.97	98.7	99.1	1	75.0-125			0.456	20

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3670715-1 06/23/21 05:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Barium	1.70	⌵	1.70	5.00
Cadmium	0.700	⌵	0.700	2.00
Chromium	1.40	⌵	1.40	10.0
Cobalt	2.30	⌵	2.30	10.0
Copper	5.30	⌵	5.30	10.0
Iron	14.1	⌵	14.1	100
Lead	1.90	⌵	1.90	5.00
Nickel	4.90	⌵	4.90	10.0
Selenium	7.40	⌵	7.40	10.0
Silver	2.80	⌵	2.80	5.00
Sodium	0.580	⌵	0.0111	1.00
Vanadium	2.40	⌵	2.40	20.0
Zinc	5.90	⌵	5.90	50.0

Laboratory Control Sample (LCS)

(LCS) R3670715-2 06/23/21 05:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	1000	942	94.2	80.0-120	
Cadmium	1000	901	90.1	80.0-120	
Chromium	1000	924	92.4	80.0-120	
Cobalt	1000	940	94.0	80.0-120	
Copper	1000	910	91.0	80.0-120	
Iron	10000	9130	91.3	80.0-120	
Lead	1000	917	91.7	80.0-120	
Nickel	1000	935	93.5	80.0-120	
Selenium	1000	908	90.8	80.0-120	
Silver	200	166	83.2	80.0-120	
Sodium	10.0	9.54	95.4	80.0-120	
Vanadium	1000	933	93.3	80.0-120	
Zinc	1000	916	91.6	80.0-120	

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

L1363629-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1363629-02 06/23/21 05:11 • (MS) R3670715-4 06/23/21 05:16 • (MSD) R3670715-5 06/23/21 05:19

Analyte	Spike Amount ug/l	Original Result	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium	1000		1530	1530	91.7	91.7	1	75.0-125			0.0220	20
Cadmium	1000		943	950	94.3	95.0	1	75.0-125			0.734	20
Chromium	1000		922	931	92.1	92.9	1	75.0-125			0.948	20
Cobalt	1000		986	993	97.4	98.2	1	75.0-125			0.750	20
Copper	1000		944	951	94.4	95.1	1	75.0-125			0.675	20
Iron	10000		58000	57500	90.0	85.4	1	75.0-125			0.796	20
Lead	1000		942	950	93.9	94.7	1	75.0-125			0.815	20
Nickel	1000		1020	1030	96.4	97.2	1	75.0-125			0.779	20
Selenium	1000		953	968	95.3	96.8	1	75.0-125			1.53	20
Silver	200		175	176	87.5	88.2	1	75.0-125			0.743	20
Sodium	10.0	75.7	83.7	83.1	80.7	75.0	1	75.0-125			0.682	20
Vanadium	1000		948	955	94.8	95.5	1	75.0-125			0.675	20
Zinc	1000		911	919	90.4	91.2	1	75.0-125			0.929	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3669994-1 06/21/21 15:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	0.754	ni	0.754	2.00
Arsenic	0.250	ni	0.250	2.00
Beryllium	0.120	ni	0.120	2.00
Thallium	0.190	ni	0.190	2.00

Laboratory Control Sample (LCS)

(LCS) R3669994-2 06/21/21 15:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	53.7	107	80.0-120	
Arsenic	50.0	51.4	103	80.0-120	
Beryllium	50.0	50.6	101	80.0-120	
Thallium	50.0	53.5	107	80.0-120	

L1362576-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1362576-01 06/21/21 15:44 • (MS) R3669994-4 06/21/21 15:52 • (MSD) R3669994-5 06/21/21 15:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	50.0	0.744	50.1	49.8	98.7	98.2	1	75.0-125			0.508	20
Beryllium	50.0	0.120	47.0	46.1	94.0	92.1	1	75.0-125			1.97	20
Thallium	50.0	0.190	49.3	51.7	98.6	103	1	75.0-125			4.72	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R3671683-1 06/24/21 16:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Antimony	0.754	ni	0.754	2.00
Arsenic	0.250	ni	0.250	2.00
Beryllium	0.120	ni	0.120	2.00
Thallium	0.190	ni	0.190	2.00

Laboratory Control Sample (LCS)

(LCS) R3671683-2 06/24/21 16:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	50.0	50.7	101	80.0-120	
Arsenic	50.0	47.1	94.3	80.0-120	
Beryllium	50.0	45.7	91.4	80.0-120	
Thallium	50.0	43.8	87.6	80.0-120	

L1363845-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1363845-18 06/24/21 16:26 • (MS) R3671683-4 06/24/21 16:33 • (MSD) R3671683-5 06/24/21 16:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	50.0	0.754	51.2	51.3	102	103	1	75.0-125			0.351	20
Arsenic	50.0	0.250	49.5	48.9	98.9	97.9	1	75.0-125			1.09	20
Beryllium	50.0	0.120	47.4	46.0	94.8	92.0	1	75.0-125			2.97	20
Thallium	50.0	0.190	44.6	44.9	89.2	89.9	1	75.0-125			0.784	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3667596-3 06/13/21 21:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1,1,2-Tetrachloroethane	0.120	jc	0.120	0.500
1,1,1-Trichloroethane	0.0940	jc	0.0940	0.500
1,1,2,2-Tetrachloroethane	0.130	jc	0.130	0.500
1,1,2-Trichloroethane	0.0940	jc	0.0940	0.500
1,1-Dichloroethane	0.114	jc	0.114	0.500
1,1-Dichloroethene	0.188	jc	0.188	0.500
1,2,3-Trichloropropane	0.247	jc	0.247	2.50
1,2-Dichlorobenzene	0.101	jc	0.101	0.500
1,2-Dichloroethane	0.108	jc	0.108	0.500
1,2-Dichloropropane	0.190	jc	0.190	0.500
1,4-Dichlorobenzene	0.121	jc	0.121	0.500
2-Butanone (MEK)	1.28	jc	1.28	5.00
2-Hexanone	0.757	jc	0.757	5.00
4-Methyl-2-pentanone (MIBK)	0.823	jc	0.823	5.00
Acrylonitrile	0.873	jc	0.873	5.00
Benzene	0.0896	jc	0.0896	0.500
Bromochloromethane	0.145	jc	0.145	0.500
Bromodichloromethane	0.0800	jc	0.0800	0.500
Bromoform	0.186	jc	0.186	0.500
Bromomethane	0.157	jc	0.157	2.50
Carbon disulfide	0.101	jc	0.101	0.500
Carbon tetrachloride	0.159	jc	0.159	0.500
Chlorobenzene	0.140	jc	0.140	0.500
Chlorodibromomethane	0.128	jc	0.128	0.500
Chloroethane	0.141	jc	0.141	2.50
Chloroform	0.0860	jc	0.0860	0.500
Chloromethane	0.153	jc	0.153	1.25
cis-1,2-Dichloroethene	0.0933	jc	0.0933	0.500
cis-1,3-Dichloropropene	0.0976	jc	0.0976	0.500
Dibromomethane	0.117	jc	0.117	0.500
Ethylbenzene	0.158	jc	0.158	0.500
Iodomethane	0.377	jc	0.377	10.0
Methylene Chloride	1.07	jc	1.07	2.50
Styrene	0.117	jc	0.117	0.500
Tetrachloroethene	0.199	jc	0.199	0.500
Toluene	0.412	jc	0.412	0.500
trans-1,2-Dichloroethene	0.152	jc	0.152	0.500
trans-1,3-Dichloropropene	0.222	jc	0.222	0.500
Trichloroethene	0.153	jc	0.153	0.500
Trichlorofluoromethane	0.130	jc	0.130	2.50

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3667596-3 06/13/21 21:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Vinyl acetate	0.645	ni	0.645	5.00
Vinyl chloride	0.118	ni	0.118	0.500
Xylenes, Total	0.316	ni	0.316	1.50
(S) 1,2-Dichloroethane-d4	98.2			70.0-130
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	99.8			77.0-126

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3667596-1 06/13/21 20:24 • (LCSD) R3667596-2 06/13/21 20:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	5.00	4.57	4.62	91.4	92.4	75.0-125			1.09	20
1,1,1-Trichloroethane	5.00	5.12	5.02	102	100	73.0-124			1.97	20
1,1,2,2-Tetrachloroethane	5.00	4.72	4.94	94.4	98.8	65.0-130			4.55	20
1,1,2-Trichloroethane	5.00	4.63	4.85	92.6	97.0	80.0-120			4.64	20
1,1-Dichloroethane	5.00	4.92	4.99	98.4	99.8	70.0-126			1.41	20
1,1-Dichloroethene	5.00	5.46	5.45	109	109	71.0-124			0.183	20
1,2,3-Trichloropropane	5.00	4.85	4.85	97.0	97.0	73.0-130			0.000	20
1,2-Dichlorobenzene	5.00	4.75	4.89	95.0	97.8	79.0-121			2.90	20
1,2-Dichloroethane	5.00	4.75	4.84	95.0	96.8	70.0-128			1.88	20
1,2-Dichloropropane	5.00	4.84	5.06	96.8	101	77.0-125			4.44	20
1,4-Dichlorobenzene	5.00	4.82	5.04	96.4	101	79.0-120			4.46	20
2-Butanone (MEK)	25.0	22.2	24.1	88.8	96.4	44.0-160			8.21	20
2-Hexanone	25.0	24.1	25.3	96.4	101	67.0-149			4.86	20
4-Methyl-2-pentanone (MIBK)	25.0	23.0	23.8	92.0	95.2	68.0-142			3.42	20
Acrylonitrile	25.0	22.1	22.4	88.4	89.6	55.0-149			1.35	20
Benzene	5.00	4.97	5.01	99.4	100	70.0-123			0.802	20
Bromochloromethane	5.00	4.88	4.71	97.6	94.2	76.0-122			3.55	20
Bromodichloromethane	5.00	4.68	5.01	93.6	100	75.0-120			6.81	20
Bromoform	5.00	4.19	4.20	83.8	84.0	68.0-132			0.238	20
Bromomethane	5.00	6.91	6.06	138	121	10.0-160			13.1	25
Carbon disulfide	5.00	5.08	5.07	102	101	61.0-128			0.197	20
Carbon tetrachloride	5.00	5.12	5.31	102	106	68.0-126			3.64	20
Chlorobenzene	5.00	4.90	5.13	98.0	103	80.0-121			4.59	20
Chlorodibromomethane	5.00	4.81	5.07	96.2	101	77.0-125			5.26	20
Chloroethane	5.00	6.31	6.04	126	121	47.0-150			4.37	20
Chloroform	5.00	4.86	4.72	97.2	94.4	73.0-120			2.92	20
Chloromethane	5.00	6.50	6.14	130	123	41.0-142			5.70	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3667596-1 06/13/21 20:24 • (LCSD) R3667596-2 06/13/21 20:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
cis-1,2-Dichloroethene	5.00	4.90	4.88	98.0	97.6	73.0-120			0.409	20
cis-1,3-Dichloropropene	5.00	4.85	5.20	97.0	104	80.0-123			6.97	20
Dibromomethane	5.00	4.82	4.89	96.4	97.8	80.0-120			1.44	20
Ethylbenzene	5.00	4.97	5.00	99.4	100	79.0-123			0.602	20
Iodomethane	25.0	25.5	25.4	102	102	33.0-147			0.393	26
Methylene Chloride	5.00	5.05	5.09	101	102	67.0-120			0.789	20
Styrene	5.00	4.99	5.16	99.8	103	73.0-130			3.35	20
Tetrachloroethene	5.00	5.05	5.38	101	108	72.0-132			6.33	20
Toluene	5.00	4.89	5.03	97.8	101	79.0-120			2.82	20
trans-1,2-Dichloroethene	5.00	5.10	5.08	102	102	73.0-120			0.393	20
trans-1,3-Dichloropropene	5.00	4.87	5.07	97.4	101	78.0-124			4.02	20
Trichloroethene	5.00	5.15	5.18	103	104	78.0-124			0.581	20
Trichlorofluoromethane	5.00	5.50	5.43	110	109	59.0-147			1.28	20
Vinyl acetate	25.0	24.9	25.0	99.6	100	11.0-160			0.401	20
Vinyl chloride	5.00	8.10	7.75	162	155	67.0-131	U	U	4.42	20
Xylenes, Total	15.0	15.2	15.5	101	103	79.0-123			1.95	20
(S) 1,2-Dichloroethane-d4				103	101	70.0-130				
(S) Toluene-d8				101	104	80.0-120				
(S) 4-Bromofluorobenzene				99.2	99.4	77.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3668780-3 06/15/21 09:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1,1,2-Tetrachloroethane	0.120	jc	0.120	0.500
1,1,1-Trichloroethane	0.0940	jc	0.0940	0.500
1,1,2,2-Tetrachloroethane	0.130	jc	0.130	0.500
1,1,2-Trichloroethane	0.0940	jc	0.0940	0.500
1,1-Dichloroethane	0.114	jc	0.114	0.500
1,1-Dichloroethene	0.188	jc	0.188	0.500
1,2,3-Trichloropropane	0.247	jc	0.247	2.50
1,2-Dichlorobenzene	0.101	jc	0.101	0.500
1,2-Dichloroethane	0.108	jc	0.108	0.500
1,2-Dichloropropane	0.190	jc	0.190	0.500
1,4-Dichlorobenzene	0.121	jc	0.121	0.500
2-Butanone (MEK)	1.28	jc	1.28	5.00
2-Hexanone	0.757	jc	0.757	5.00
4-Methyl-2-pentanone (MIBK)	0.823	jc	0.823	5.00
Acetone	1.05	jc	1.05	25.0
Acrylonitrile	0.873	jc	0.873	5.00
Benzene	0.0896	jc	0.0896	0.500
Bromochloromethane	0.145	jc	0.145	0.500
Bromodichloromethane	0.0800	jc	0.0800	0.500
Bromoform	0.186	jc	0.186	0.500
Bromomethane	0.157	jc	0.157	2.50
Carbon disulfide	0.101	jc	0.101	0.500
Carbon tetrachloride	0.159	jc	0.159	0.500
Chlorobenzene	0.140	jc	0.140	0.500
Chlorodibromomethane	0.128	jc	0.128	0.500
Chloroethane	0.141	jc	0.141	2.50
Chloroform	0.0860	jc	0.0860	0.500
Chloromethane	0.153	jc	0.153	1.25
cis-1,2-Dichloroethene	0.0933	jc	0.0933	0.500
cis-1,3-Dichloropropene	0.0976	jc	0.0976	0.500
Dibromomethane	0.117	jc	0.117	0.500
Ethylbenzene	0.158	jc	0.158	0.500
Iodomethane	0.377	jc	0.377	10.0
Methylene Chloride	1.07	jc	1.07	2.50
Styrene	0.117	jc	0.117	0.500
Tetrachloroethene	0.199	jc	0.199	0.500
Toluene	0.412	jc	0.412	0.500
trans-1,2-Dichloroethene	0.152	jc	0.152	0.500
trans-1,3-Dichloropropene	0.222	jc	0.222	0.500
trans-1,4-Dichloro-2-butene	0.257	jc	0.257	5.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3668780-3 06/15/21 09:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Trichloroethene	0.153	ni	0.153	0.500
Trichlorofluoromethane	0.130	ni	0.130	2.50
Vinyl acetate	0.645	ni	0.645	5.00
Vinyl chloride	0.118	ni	0.118	0.500
Xylenes, Total	0.316	ni	0.316	1.50
(S) 1,2-Dichloroethane-d4	107			70.0-130
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	94.4			77.0-126

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3668780-1 06/15/21 08:06 • (LCSD) R3668780-2 06/15/21 08:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	5.00	4.54	4.37	90.8	87.4	75.0-125			3.82	20
1,1,1-Trichloroethane	5.00	4.71	4.91	94.2	98.2	73.0-124			4.16	20
1,1,2,2-Tetrachloroethane	5.00	4.91	4.51	98.2	90.2	65.0-130			8.49	20
1,1,2-Trichloroethane	5.00	4.92	4.75	98.4	95.0	80.0-120			3.52	20
1,1-Dichloroethane	5.00	4.92	4.92	98.4	98.4	70.0-126			0.000	20
1,1-Dichloroethene	5.00	5.06	4.98	101	99.6	71.0-124			1.59	20
1,2,3-Trichloropropane	5.00	5.18	4.74	104	94.8	73.0-130			8.87	20
1,2-Dichlorobenzene	5.00	4.53	4.59	90.6	91.8	79.0-121			1.32	20
1,2-Dichloroethane	5.00	5.54	5.44	111	109	70.0-128			1.82	20
1,2-Dichloropropane	5.00	4.91	4.68	98.2	93.6	77.0-125			4.80	20
1,4-Dichlorobenzene	5.00	4.53	4.79	90.6	95.8	79.0-120			5.58	20
2-Butanone (MEK)	25.0	23.4	23.5	93.6	94.0	44.0-160			0.426	20
2-Hexanone	25.0	25.2	25.3	101	101	67.0-149			0.396	20
4-Methyl-2-pentanone (MIBK)	25.0	27.9	27.9	112	112	68.0-142			0.000	20
Acetone	25.0	19.4	19.8	77.6	79.2	19.0-160			2.04	27
Acrylonitrile	25.0	25.9	26.6	104	106	55.0-149			2.67	20
Benzene	5.00	5.01	4.90	100	98.0	70.0-123			2.22	20
Bromochloromethane	5.00	4.97	4.99	99.4	99.8	76.0-122			0.402	20
Bromodichloromethane	5.00	4.81	4.83	96.2	96.6	75.0-120			0.415	20
Bromoform	5.00	3.81	3.64	76.2	72.8	68.0-132			4.56	20
Bromomethane	5.00	4.61	4.73	92.2	94.6	10.0-160			2.57	25
Carbon disulfide	5.00	4.58	4.76	91.6	95.2	61.0-128			3.85	20
Carbon tetrachloride	5.00	4.50	4.57	90.0	91.4	68.0-126			1.54	20
Chlorobenzene	5.00	5.01	5.02	100	100	80.0-121			0.199	20
Chlorodibromomethane	5.00	4.19	4.17	83.8	83.4	77.0-125			0.478	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3668780-1 06/15/21 08:06 • (LCSD) R3668780-2 06/15/21 08:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Chloroethane	5.00	5.35	5.23	107	105	47.0-150			2.27	20
Chloroform	5.00	5.05	5.17	101	103	73.0-120			2.35	20
Chloromethane	5.00	5.97	5.79	119	116	41.0-142			3.06	20
cis-1,2-Dichloroethene	5.00	5.23	5.23	105	105	73.0-120			0.000	20
cis-1,3-Dichloropropene	5.00	4.65	4.58	93.0	91.6	80.0-123			1.52	20
Dibromomethane	5.00	5.38	5.43	108	109	80.0-120			0.925	20
Ethylbenzene	5.00	4.59	4.75	91.8	95.0	79.0-123			3.43	20
Iodomethane	25.0	24.9	25.1	99.6	100	33.0-147			0.800	26
Methylene Chloride	5.00	5.26	5.27	105	105	67.0-120			0.190	20
Styrene	5.00	4.36	4.60	87.2	92.0	73.0-130			5.36	20
Tetrachloroethene	5.00	4.48	4.47	89.6	89.4	72.0-132			0.223	20
Toluene	5.00	4.84	5.03	96.8	101	79.0-120			3.85	20
trans-1,2-Dichloroethene	5.00	4.68	4.83	93.6	96.6	73.0-120			3.15	20
trans-1,3-Dichloropropene	5.00	4.39	4.26	87.8	85.2	78.0-124			3.01	20
trans-1,4-Dichloro-2-butene	5.00	5.36	5.96	107	119	33.0-144			10.6	20
Trichloroethene	5.00	5.08	5.43	102	109	78.0-124			6.66	20
Trichlorofluoromethane	5.00	3.99	4.24	79.8	84.8	59.0-147			6.08	20
Vinyl acetate	25.0	12.0	8.16	48.0	32.6	11.0-160			38.1	20
Vinyl chloride	5.00	5.38	5.25	108	105	67.0-131			2.45	20
Xylenes, Total	15.0	13.8	14.1	92.0	94.0	79.0-123			2.15	20
(S) 1,2-Dichloroethane-d4				109	107	70.0-130				
(S) Toluene-d8				102	102	80.0-120				
(S) 4-Bromofluorobenzene				96.3	97.3	77.0-126				

L1364047-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1364047-02 06/15/21 11:39 • (MS) R3668780-4 06/15/21 17:43 • (MSD) R3668780-5 06/15/21 18:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,1,1,2-Tetrachloroethane	5.00	0.120	5.57	5.66	111	113	1	36.0-151			1.60	29
1,1,1-Trichloroethane	5.00	0.0940	6.41	5.95	128	119	1	23.0-160			7.44	28
1,1,2,2-Tetrachloroethane	5.00	0.130	7.24	7.03	145	141	1	33.0-150			2.94	28
1,1,2-Trichloroethane	5.00	0.0940	6.09	5.80	122	116	1	35.0-147			4.88	27
1,1-Dichloroethane	5.00	0.114	6.38	6.50	128	130	1	25.0-158			1.86	27
1,1-Dichloroethene	5.00	0.188	6.75	6.30	135	126	1	11.0-160			6.90	29
1,2,3-Trichloropropane	5.00	0.247	6.12	5.97	122	119	1	34.0-151			2.48	29
1,2-Dichlorobenzene	5.00	0.101	5.73	5.88	115	118	1	34.0-149			2.58	28
1,2-Dichloroethane	5.00	0.108	6.68	6.66	134	133	1	29.0-151			0.300	27
1,2-Dichloropropane	5.00	0.190	5.94	5.86	119	117	1	30.0-156			1.36	27

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1364047-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1364047-02 06/15/21 11:39 • (MS) R3668780-4 06/15/21 17:43 • (MSD) R3668780-5 06/15/21 18:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	5.00	0.121	5.84	6.03	117	121	1	35.0-142			3.20	27
2-Butanone (MEK)	25.0	1.28	27.2	30.3	109	121	1	10.0-160			10.8	32
2-Hexanone	25.0	0.757	30.7	31.5	123	126	1	21.0-160			2.57	29
4-Methyl-2-pentanone (MIBK)	25.0	0.823	33.5	34.4	134	138	1	29.0-160			2.65	29
Acetone	25.0	1.05	24.3	29.3	97.2	117	1	10.0-160			18.7	35
Acrylonitrile	25.0	0.873	30.9	33.5	124	134	1	21.0-160			8.07	32
Benzene	5.00	0.0896	6.34	6.03	127	121	1	17.0-158			5.01	27
Bromochloromethane	5.00	0.145	6.11	5.97	122	119	1	38.0-142			2.32	26
Bromodichloromethane	5.00	0.0800	6.18	6.26	124	125	1	31.0-150			1.29	27
Bromoform	5.00	0.186	4.59	4.58	91.8	91.6	1	29.0-150			0.218	29
Bromomethane	5.00	0.157	6.50	6.19	130	124	1	10.0-160			4.89	38
Carbon disulfide	5.00	0.101	5.75	5.47	115	109	1	10.0-156			4.99	28
Carbon tetrachloride	5.00	0.159	5.91	5.65	118	113	1	23.0-159			4.50	28
Chlorobenzene	5.00	0.140	6.04	6.19	121	124	1	33.0-152			2.45	27
Chlorodibromomethane	5.00	0.128	5.24	5.22	105	104	1	37.0-149			0.382	27
Chloroethane	5.00	0.141	7.41	7.31	148	146	1	10.0-160			1.36	30
Chloroform	5.00	0.0860	6.57	6.41	131	128	1	29.0-154			2.47	28
Chloromethane	5.00	0.153	7.90	7.41	158	148	1	10.0-160			6.40	29
cis-1,2-Dichloroethene	5.00	0.0933	6.90	6.66	138	133	1	10.0-160			3.54	27
cis-1,3-Dichloropropene	5.00	0.0976	5.60	5.48	112	110	1	34.0-149			2.17	28
Dibromomethane	5.00	0.117	6.68	6.58	134	132	1	30.0-151			1.51	27
Ethylbenzene	5.00	0.158	5.94	5.94	119	119	1	30.0-155			0.000	27
Iodomethane	25.0	0.377	31.5	30.8	126	123	1	10.0-160			2.25	40
Methylene Chloride	5.00	1.07	6.57	6.41	131	128	1	23.0-144			2.47	28
Styrene	5.00	0.117	5.54	5.58	111	112	1	33.0-155			0.719	28
Tetrachloroethene	5.00	0.199	5.61	5.22	112	104	1	10.0-160			7.20	27
Toluene	5.00	0.412	6.14	5.97	123	119	1	26.0-154			2.81	28
trans-1,2-Dichloroethene	5.00	0.152	6.07	6.07	121	121	1	17.0-153			0.000	27
trans-1,3-Dichloropropene	5.00	0.222	5.46	5.35	109	107	1	32.0-149			2.04	28
trans-1,4-Dichloro-2-butene	5.00	0.257	8.10	6.96	162	139	1	10.0-157	U		15.1	37
Trichloroethene	5.00	1.21	6.73	6.82	110	112	1	10.0-160			1.33	25
Trichlorofluoromethane	5.00	0.130	5.95	6.11	119	122	1	17.0-160			2.65	31
Vinyl acetate	25.0	0.645	40.6	39.1	162	156	1	12.0-160	U		3.76	31
Vinyl chloride	5.00	0.118	7.41	6.98	148	140	1	10.0-160			5.98	27
Xylenes, Total	15.0	0.316	16.7	17.3	111	115	1	29.0-154			3.53	28
(S) 1,2-Dichloroethane-d4					111	108		70.0-130				
(S) Toluene-d8					99.7	97.8		80.0-120				
(S) 4-Bromofluorobenzene					94.4	96.1		77.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3668409-3 06/15/21 00:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	1.05	jc	1.05	25.0
Acrylonitrile	0.873	jc	0.873	5.00
Benzene	0.0896	jc	0.0896	0.500
Bromodichloromethane	0.0800	jc	0.0800	0.500
Bromochloromethane	0.145	jc	0.145	0.500
Bromoform	0.186	jc	0.186	0.500
Bromomethane	0.157	jc	0.157	2.50
Carbon disulfide	0.101	jc	0.101	0.500
Carbon tetrachloride	0.159	jc	0.159	0.500
Chlorobenzene	0.140	jc	0.140	0.500
Chlorodibromomethane	0.128	jc	0.128	0.500
Chloroethane	0.141	jc	0.141	2.50
Chloroform	0.0860	jc	0.0860	0.500
Chloromethane	0.153	jc	0.153	1.25
Dibromomethane	0.117	jc	0.117	0.500
1,2-Dichlorobenzene	0.101	jc	0.101	0.500
1,4-Dichlorobenzene	0.121	jc	0.121	0.500
1,1-Dichloroethane	0.114	jc	0.114	0.500
1,2-Dichloroethane	0.108	jc	0.108	0.500
1,1-Dichloroethene	0.188	jc	0.188	0.500
cis-1,2-Dichloroethene	0.0933	jc	0.0933	0.500
trans-1,2-Dichloroethene	0.152	jc	0.152	0.500
1,2-Dichloropropane	0.190	jc	0.190	0.500
cis-1,3-Dichloropropene	0.0976	jc	0.0976	0.500
trans-1,3-Dichloropropene	0.222	jc	0.222	0.500
trans-1,4-Dichloro-2-butene	0.257	jc	0.257	5.00
Ethylbenzene	0.158	jc	0.158	0.500
2-Hexanone	0.757	jc	0.757	5.00
Iodomethane	0.377	jc	0.377	10.0
2-Butanone (MEK)	1.28	jc	1.28	5.00
Methylene Chloride	1.07	jc	1.07	2.50
4-Methyl-2-pentanone (MIBK)	0.823	jc	0.823	5.00
Styrene	0.117	jc	0.117	0.500
1,1,1,2-Tetrachloroethane	0.120	jc	0.120	0.500
1,1,2,2-Tetrachloroethane	0.130	jc	0.130	0.500
Tetrachloroethene	0.199	jc	0.199	0.500
Toluene	0.412	jc	0.412	0.500
1,1,1-Trichloroethane	0.0940	jc	0.0940	0.500
1,1,2-Trichloroethane	0.0940	jc	0.0940	0.500
Trichloroethene	0.153	jc	0.153	0.500

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3668409-3 06/15/21 00:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Trichlorofluoromethane	0.130	⚡	0.130	2.50
1,2,3-Trichloropropane	0.247	⚡	0.247	2.50
Vinyl acetate	0.645	⚡	0.645	5.00
Vinyl chloride	0.118	⚡	0.118	0.500
Xylenes, Total	0.316	⚡	0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) 4-Bromofluorobenzene	97.3			77.0-126
(S) 1,2-Dichloroethane-d4	111			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3668409-1 06/14/21 23:14 • (LCSD) R3668409-2 06/14/21 23:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	29.1	29.9	116	120	19.0-160			2.71	27
Acrylonitrile	25.0	28.2	26.6	113	106	55.0-149			5.84	20
Benzene	5.00	5.23	5.21	105	104	70.0-123			0.383	20
Bromodichloromethane	5.00	4.65	4.71	93.0	94.2	75.0-120			1.28	20
Bromochloromethane	5.00	5.71	5.58	114	112	76.0-122			2.30	20
Bromoform	5.00	4.83	5.01	96.6	100	68.0-132			3.66	20
Bromomethane	5.00	4.85	4.46	97.0	89.2	10.0-160			8.38	25
Carbon disulfide	5.00	4.85	4.65	97.0	93.0	61.0-128			4.21	20
Carbon tetrachloride	5.00	4.80	4.90	96.0	98.0	68.0-126			2.06	20
Chlorobenzene	5.00	4.64	4.69	92.8	93.8	80.0-121			1.07	20
Chlorodibromomethane	5.00	4.77	4.93	95.4	98.6	77.0-125			3.30	20
Chloroethane	5.00	4.25	4.18	85.0	83.6	47.0-150			1.66	20
Chloroform	5.00	5.04	4.93	101	98.6	73.0-120			2.21	20
Chloromethane	5.00	3.95	4.20	79.0	84.0	41.0-142			6.13	20
Dibromomethane	5.00	5.40	5.38	108	108	80.0-120			0.371	20
1,2-Dichlorobenzene	5.00	4.89	5.19	97.8	104	79.0-121			5.95	20
1,4-Dichlorobenzene	5.00	4.75	4.99	95.0	99.8	79.0-120			4.93	20
1,1-Dichloroethane	5.00	4.92	4.90	98.4	98.0	70.0-126			0.407	20
1,2-Dichloroethane	5.00	4.91	4.90	98.2	98.0	70.0-128			0.204	20
1,1-Dichloroethene	5.00	4.36	4.37	87.2	87.4	71.0-124			0.229	20
cis-1,2-Dichloroethene	5.00	5.07	5.25	101	105	73.0-120			3.49	20
trans-1,2-Dichloroethene	5.00	4.84	4.72	96.8	94.4	73.0-120			2.51	20
1,2-Dichloropropane	5.00	5.09	5.03	102	101	77.0-125			1.19	20
cis-1,3-Dichloropropene	5.00	4.73	4.69	94.6	93.8	80.0-123			0.849	20
trans-1,3-Dichloropropene	5.00	4.92	4.98	98.4	99.6	78.0-124			1.21	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3668409-1 06/14/21 23:14 • (LCSD) R3668409-2 06/14/21 23:33

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
trans-1,4-Dichloro-2-butene	5.00	4.52	4.77	90.4	95.4	33.0-144			5.38	20
Ethylbenzene	5.00	4.74	4.90	94.8	98.0	79.0-123			3.32	20
2-Hexanone	25.0	23.7	23.8	94.8	95.2	67.0-149			0.421	20
Iodomethane	25.0	23.8	23.7	95.2	94.8	33.0-147			0.421	26
2-Butanone (MEK)	25.0	26.8	26.1	107	104	44.0-160			2.65	20
Methylene Chloride	5.00	4.82	4.87	96.4	97.4	67.0-120			1.03	20
4-Methyl-2-pentanone (MIBK)	25.0	24.4	24.8	97.6	99.2	68.0-142			1.63	20
Styrene	5.00	4.56	4.64	91.2	92.8	73.0-130			1.74	20
1,1,1,2-Tetrachloroethane	5.00	4.88	5.26	97.6	105	75.0-125			7.50	20
1,1,2,2-Tetrachloroethane	5.00	4.91	5.04	98.2	101	65.0-130			2.61	20
Tetrachloroethene	5.00	4.72	4.87	94.4	97.4	72.0-132			3.13	20
Toluene	5.00	4.85	4.94	97.0	98.8	79.0-120			1.84	20
1,1,1-Trichloroethane	5.00	4.73	4.80	94.6	96.0	73.0-124			1.47	20
1,1,2-Trichloroethane	5.00	4.98	5.13	99.6	103	80.0-120			2.97	20
Trichloroethene	5.00	4.70	4.68	94.0	93.6	78.0-124			0.426	20
Trichlorofluoromethane	5.00	4.90	4.91	98.0	98.2	59.0-147			0.204	20
1,2,3-Trichloropropane	5.00	5.37	5.67	107	113	73.0-130			5.43	20
Vinyl acetate	25.0	15.2	15.3	60.8	61.2	11.0-160			0.656	20
Vinyl chloride	5.00	4.21	4.13	84.2	82.6	67.0-131			1.92	20
Xylenes, Total	15.0	14.1	14.6	94.0	97.3	79.0-123			3.48	20
(S) Toluene-d8				101	102	80.0-120				
(S) 4-Bromofluorobenzene				97.3	97.4	77.0-126				
(S) 1,2-Dichloroethane-d4				113	111	70.0-130				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3668385-4 06/16/21 18:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	1.05	ni	1.05	25.0
Tetrachloroethene	0.199	ni	0.199	0.500
trans-1,4-Dichloro-2-butene	0.257	ni	0.257	5.00
(S) 1,2-Dichloroethane-d4	118			70.0-130
(S) Toluene-d8	103			80.0-120
(S) 4-Bromofluorobenzene	83.7			77.0-126

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3668385-1 06/16/21 16:40 • (LCSD) R3668385-2 06/16/21 17:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	22.8	26.1	91.2	104	19.0-160			13.5	27
Tetrachloroethene	5.00	5.16	5.18	103	104	72.0-132			0.387	20
trans-1,4-Dichloro-2-butene	5.00	3.73	1.95	74.6	39.0	33.0-144		J	62.7	20
(S) 1,2-Dichloroethane-d4				114	113	70.0-130				
(S) Toluene-d8				103	103	80.0-120				
(S) 4-Bromofluorobenzene				94.3	95.9	77.0-126				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3666891-1 06/11/21 18:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylene Dibromide	0.00240	U	0.00240	0.0100
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200

L1362814-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1362814-02 06/11/21 19:22 • (DUP) R3666891-3 06/11/21 19:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethylene Dibromide	0.00240	0.00240	1	0.000	U	20
1,2-Dibromo-3-Chloropropane	0.00430	0.00430	1	0.000	U	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3666891-4 06/11/21 21:23 • (LCSD) R3666891-5 06/12/21 00:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylene Dibromide	0.250	0.265	0.267	106	107	60.0-140			0.752	20
1,2-Dibromo-3-Chloropropane	0.250	0.241	0.237	96.4	94.8	60.0-140			1.67	20

L1362888-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1362888-03 06/11/21 18:58 • (MS) R3666891-2 06/11/21 18:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ethylene Dibromide	0.100	0.00240	0.116	116	1	64.0-159	
1,2-Dibromo-3-Chloropropane	0.100	0.00430	0.102	102	1	72.0-148	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3666947-1 06/12/21 11:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylene Dibromide	0.00240	U	0.00240	0.0100
1,2-Dibromo-3-Chloropropane	0.00430	U	0.00430	0.0200

L1362888-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1362888-24 06/12/21 12:12 • (DUP) R3666947-3 06/12/21 12:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethylene Dibromide	0.00240	0.00240	1	0.000	U	20
1,2-Dibromo-3-Chloropropane	0.00430	0.00430	1	0.000	U	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3666947-4 06/12/21 14:14 • (LCSD) R3666947-5 06/12/21 16:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylene Dibromide	0.250	0.271	0.275	108	110	60.0-140			1.47	20
1,2-Dibromo-3-Chloropropane	0.250	0.243	0.257	97.2	103	60.0-140			5.60	20

L1363845-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1363845-02 06/12/21 11:48 • (MS) R3666947-2 06/12/21 11:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ethylene Dibromide	0.100	0.00240	0.114	114	1	64.0-159	
1,2-Dibromo-3-Chloropropane	0.100	0.00430	0.102	102	1	72.0-148	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

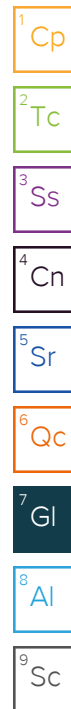
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	The value is outside laboratory established criteria.
L	Off-scale high. Actual value is known to be greater than value given.
U	Indicates the compound was analyzed for but not detected above the method detection limit.
V	Indicates the analyte was detected in both the sample and method blank.



ACCREDITATIONS & LOCATIONS

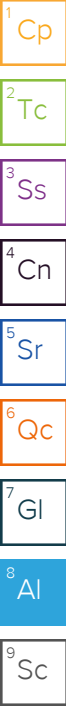
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

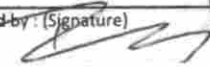
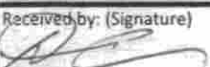
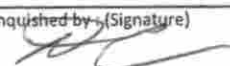
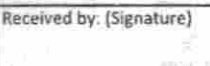
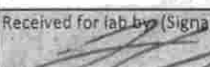
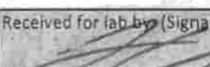
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Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

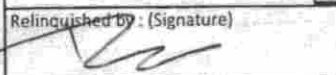
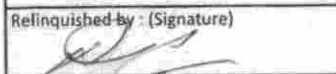
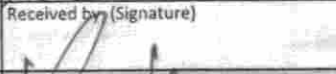
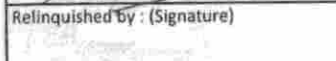
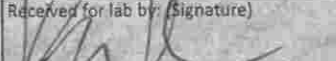


Company Name/Address: Vista 4978 LB McLeod Road Orlando, FL 32811				Billing Information: jhill16@wm.com P.O. Box 4745 WM A/P DEPARTMENT Portland, OR 97208-4745				Pres Chk		Analysis / Container / Preservative								Chain of Custody Page 1 of 1  12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/tube/pas-standard-terms.pdf					
Report to: Sheree Grant				Email To: sgrant@wm.com;efoeller@wm.com;kguilbeault																			
Project Description: Vista-Semiannual GW Parameters June Dec				City/State Collected: _____				Please Circle: PT MT CT ET															
Phone: 407-902-1469				Client Project # 200				Lab Project # WMVISFL-00003															
Collected by (print): DANNY ARMOUR				Site/Facility ID # FL26				P.O. #															
Collected by (signature): 				Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day				Quote #															
Immediately Packed on Ice N ☐ Y ☒				Date Results Needed				No. of Cntrs															
Sample ID				Comp/Grab		Matrix *		Depth		Date		Time		Cntrs									
MW-1A				G		GW				6-7		1321		10									
MW-2AR						GW								10									
MW-3A				G		GW				6-7		1014		10									
MW-4A				G		GW				6-7		1052		10									
MW-5A				G		GW				6-7		1137		10									
MW-6AR						GW								10									
MW-7A				G		GW				6-7		1225		10									
MW-8R						GW								10									
MW-9A				G		GW				6-7		0906		10									
MW-11A				G		GW				6-7		0832		10									
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other				Remarks: Nitrate = 48 hour holding time. Sample receiving: samples may be received over multiple days and must be logged to same SDG.														pH _____ Temp _____ Flow _____ Other _____					
Relinquished by: (Signature) 				Date: 5/15/21		Time: 1200		Received by: (Signature) 				Trip Blank Received: Yes/No HCl / MeOH TBR				Sample Receipt Checklist COC Seal Present/Intact: ☒ Y ☐ N COC Signed/Accurate: ☒ Y ☐ N Bottles arrive intact: ☒ Y ☐ N Correct bottles used: ☒ Y ☐ N Sufficient volume sent: ☒ Y ☐ N If Applicable VOA Zero Headspace: ☒ Y ☐ N Preservation Correct/Checked: ☒ Y ☐ N RAD Screen <0.5 mR/hr: ☒ Y ☐ N							
Relinquished by: (Signature) 				Date: 6-7-21		Time: 1700		Received by: (Signature) 				Temp: 28.3 Bottles Received: 2.11 28.3 + 3 = 2.11 99				If preservation required by Login: Date/Time							
Relinquished by: (Signature) 				Date: 6/8/21		Time: 0900		Received for lab by: (Signature) 				Date: 6/8/21 Time: 0900				Hold:		Conditions: NCF / 6K					

[illegible]

Company Name/Address: Vista 4978 LB McLeod Road Orlando, FL 32811				Billing Information: jhill16@wm.com P.O. Box 4745 WM A/P DEPARTMENT Portland, OR 97208-4745				Pres Chk		Analysis / Container / Preservative						Chain of Custody Page <u> </u> of <u> </u>			
Report to: Sheree Grant				Email To: sgrant@wm.com;efoeller@wm.com;kguilbeault												 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/submit/pace-standard-terms.pdf			
Project Description: Vista-Semiannual GW Parameters June Dec				City/State Collected:		Please Circle: PT MT CT ET													
Phone: 407-902-1469		Client Project # 200		Lab Project # WMVISFL-00003															
Collected by (print): DANNY ARMSTRONG		Site/Facility ID # FL26		P.O. #												SDG # U1362888 E048 Acctnum: WMVISFL Template: T168185 Prelogin: P841778 PM: 616 - Stacy Kennedy PB: <i>DU 5/5/21</i> Shipped Via: FedEX Ground			
Collected by (signature): <i>[Signature]</i>		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #		Date Results Needed		No. of Cntrs											
Immediately Packed on Ice N <u> </u> Y <u>X</u>																			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time												Remarks	Sample # (lab only)	
MW-1A		GW				10		X	X	X	X	X	X						
MW-2AR	G	GW		6-8	0810	10		X	X	X	X	X	X					-20	
MW-3A		GW				10		X	X	X	X	X	X						
MW-4A		GW				10		X	X	X	X	X	X						
MW-5A		GW				10		X	X	X	X	X	X						
MW-6AR	G	GW		6-8	0912	10		X	X	X	X	X	X					-21	
MW-7A		GW				10		X	X	X	X	X	X						
MW-8R	G	GW		6-8	0720	10		X	X	X	X	X	X					-22	
MW-9A		GW				10		X	X	X	X	X	X						
MW-11A		GW				10		X	X	X	X	X	X						
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____				Remarks: Nitrate = 48 hour holding time. Sample receiving: samples may be received over multiple days and must be logged to same SDG.				pH _____ Temp _____ Flow _____ Other _____				Sample Receipt Checklist COC Seal Present/Intact: <u> </u> NP <u> </u> Y <u> </u> N COC Signed/Accurate: <u> </u> X <u> </u> N Bottles arrive intact: <u> </u> X <u> </u> N Correct bottles used: <u> </u> X <u> </u> N Sufficient volume sent: <u> </u> X <u> </u> N If Applicable VOA Zero Headspace: <u> </u> Y <u> </u> N Preservation Correct/Checked: <u> </u> X <u> </u> N RAD Screen <0.5 mR/hr: <u> </u> Y <u> </u> N							
Relinquished by: (Signature) <i>[Signature]</i>				Date: 5/15/21		Time: 1200		Received by: (Signature) <i>[Signature]</i>				Trip Blank Received: Yes/No HCL/MeOH TBR							
Relinquished by: (Signature) <i>[Signature]</i>				Date: 6-8-21		Time: 1730		Received by: (Signature) <i>[Signature]</i>				Temp: 26.0°C 28-25-26 41 Bottles Received:				If preservation required by Login: Date/Time			
Relinquished by: (Signature) <i>[Signature]</i>				Date:		Time:		Received for lab by: (Signature) <i>[Signature]</i>				Date: 6-9-21 Time: 10:15				Hold:		Condition: NCF / OK	

Company Name/Address: Vista 4978 LB McLeod Road Orlando, FL 32811		Billing Information: jhill16@wm.com P.O. Box 4745 WM A/P DEPARTMENT Portland, OR 97208-4745		Analysis / Container / Preservative Pres Chk X 3		Chain of Custody Page <u> </u> of <u> </u> 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf										
Report to: Sheree Grant		Email To: sgrant@wm.com;efoeller@wm.com;kguilbeault		ALK 125mlHDPE-NoPres CHLORIDE, NITRATE 125mlHDPE-NoPres Metals 250mlHDPE-HNO3 NH3 250mlHDPE-H2SO4 SV8011 40mlClr-NaThio TDS 250mlHDPE-NoPres V8260LL 40mlAmb-HCl V8260LL 40mlAmb-HCl-Bik		SDG # <u>U362888</u> Table # Acctnum: WMVISFL Template: T168185 Prelogin: P841778 PM: 616 - Stacy Kennedy PB: <u>DU 5/15/21</u> Shipped Via: FedEx Ground										
Project Description: Vista-Semiannual GW Parameters June Dec		City/State: Collected:						Please Circle: PT MT CT ET								
Phone: 407-902-1469		Client Project # 200						Lab Project # WMVISFL-00003								
Collected by (print): <u>Danny Armoja</u>		Site/Facility ID # FL26						P.O. #								
Collected by (signature): 		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #												
Immediately Packed on Ice N <u> </u> Y <u>X</u>		Date Results Needed		No. of Cntrs												
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time										
MW-14A			GW				10	X	X	X	X	X	X			
MW-15A			GW				10	X	X	X	X	X	X			
TRIP BLANK		G	GW		6-8	-	2							X		-23
Equipment Blank		G	GW		6-8	0830	7	X	X	X	X	X				-24
MW-1A			GW				1	X								
MW-2AR		G	GW		6-8	0810	1	X								-25
MW-3A			GW				1	X								
MW-4A			GW				1	X								
MW-5A			GW				1	X								
MW-6AR		G	GW		6-8	0912	1	X								-26
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks: Nitrate = 48 hour holding time. Sample receiving: samples may be received over multiple days and must be logged to same SDG. Samples returned via: ☐ UPS ☐ FedEx ☐ Courier Tracking #						pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist COC Seal Present/Intact: ☐ NP <u> </u> Y <u> </u> N COC Signed/Accurate: ☐ Y <u> </u> N Bottles airtight: ☐ Y <u> </u> N Correct bottles used: ☐ Y <u> </u> N Sufficient volume sent: ☐ Y <u> </u> N If Applicable VOA Zero Headspace: ☐ Y <u> </u> N Preservation Correct/Checked: ☐ Y <u> </u> N RAD Screen <0.5 mR/hr: ☐ Y <u> </u> N						
Relinquished by: (Signature) 		Date: 5/15/21		Time: 1200		Received By: (Signature) 		Trip Blank Received: Yes / No <u> </u>		If preservation required by Login: Date/Time						
Relinquished by: (Signature) 		Date: 6-8-21		Time: 1730		Received By: (Signature) 		Temp: 17.6°C Bottles Received: 24-22.6 L-11 TBR								
Relinquished by: (Signature) 		Date:		Time:		Received for lab by: (Signature) 		Date: 6-9-21 Time: 10:15								
										Hold:		Condition: NCF / OK				

Company Name/Address: Vista 4978 LB McLeod Road Orlando, FL 32811		Billing Information: jhill16@wm.com P.O. Box 4745 WM A/P DEPARTMENT Portland, OR 97208-4745		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page 1 of 1			
Report to: Sheree Grant		Email To: sgrant@wm.com;efoeller@wm.com;kguilbeault														 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf			
Project Description: Vista-Semiannual GW Parameters June Dec		City/State Collected:		Please Circle: PT MT CT ET												SDG # U362888			
Phone: 407-902-1469		Client Project # 200		Lab Project # WMVISFL-00001												Table #			
Collected by (print): Danny Armour		Site/Facility ID # FL26		P.O. #												Acctnum: WMVISFL			
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day		Quote #												Template: T168185			
Immediately Packed on Ice N ☐ Y ☒				Date Results Needed		No. of Ctrs												Prelogin: P841778	
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time		ALK 125mlHDPE-NoPres	CHLORIDE, NITRATE 125mlHDPE-NoPres	Metals 250mlHDPE-HNO3	NH3 250mlHDPE-H2SO4	SV8011 40mlIClr-NaThio	TDS 250mlHDPE-NoPres	V8260LL 40mlAmb-HCl	V8260LL 40mlAmb-HCl-Bik	Remarks		Sample # (lab only)	
MW-7A			GW				1	X											
MW-8R		G	GW		6-8	0720	1	X										-27	
MW-9A			GW				1	X											
MW-11A			GW				1	X											
MW-14A			GW				1	X											
MW-15A			GW				1	X											
Equipment Blank		G	GW		6-8	0830	1	X										-28	
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Waste Water DW - Drinking Water OT - Other		Remarks: Nitrate = 48 hour holding time. Sample receiving: samples may be received over multiple days and must be logged to same SDG.		pH _____ Temp _____ Flow _____ Other _____												Sample Receipt Checklist COC Seal Present/Intact: NP ☒ Y ☐ N COC Signed/Accurate: ☒ Y ☐ N Bottles arrive intact: ☒ Y ☐ N Correct bottles used: ☒ Y ☐ N Sufficient volume sent: ☒ Y ☐ N If Applicable VOA Zero Headspace: ☒ Y ☐ N Preservation Correct/Checked: ☒ Y ☐ N RAD Screen <0.5 mR/hr: ☒ Y ☐ N			
Samples returned Via: UPS FedEx Courier		Tracking #																	
Relinquished by: (Signature) 		Date: 6/5/15	Time: 1200	Received by: (Signature) 		Trip Blank Received: Yes/No HCL MeOH TBR													
Relinquished by: (Signature) 		Date: 6-8-21	Time: 1730	Received by: (Signature) 		Temp: 12.6°C Bottles Received: 2-8-2-2-6 C												If preservation required by Login: Date/Time	
Relinquished by: (Signature) 		Date:	Time:	Received for lab by: (Signature) 		Date: 6-9-21 Time: 10:15												Hold: Condition: NCF / OK	

GROUNDWATER SAMPLING LOG

SITE NAME: VISTA		SITE LOCATION: APDPCA, FL	
WELL NO: MW-DIA	SAMPLE ID:		DATE: 6-7-25

PURGING DATA						
WELL DIAMETER (Inches):	2	TUBING DIAMETER (Inches):	3/4	WELL SCREEN INTERVAL DEPTH: 2.2 feet to 1.2 feet	STATIC DEPTH TO WATER (feet): 44.85	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 109.47			GROUNDWATER ELEVATION (ft NGVD): 64.62			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)						

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

$$= 0.3 \text{ gallons} + (0.006 \text{ gallons/foot} \times 69.71 \text{ feet}) + 0.05 \text{ gallons} = 0.93 \text{ gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 64.71	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 64.71	PURGING INITIATED AT: 1301	PURGING ENDED AT: 1321	TOTAL VOLUME PURGED (gallons): 5.2
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.78" = 0.02; 1" = 0.04; 1.28" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify _____)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>ACC</u> <u>DAN ARMOUR / ACC-Tech</u>		SAMPLER(S) SIGNATURE(S): <u>ACC</u>		SAMPLING INITIATED AT: <u>1321</u>		SAMPLING ENDED AT: <u>NR</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>64.31</u>		TUBING MATERIAL CODE: <u>T</u>		FIELD-FILTERED: Y <u>(N)</u> <u>µm</u> Filtration Equipment Type:		FILTER SIZE:	
FIELD DECONTAMINATION: PUMP Y <u>(N)</u> TUBING Y <u>(N)</u> <u>(replaced)</u>				DUPLICATE: Y <u>(N)</u>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE gal/(min per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	G	40ml	HCl	-	NM	VDA	0.26	BP
	3	G	40ml	Nathio	-		EDB/DBCP		
	1	P	1000 ml	-	-		G-CHEM		
	1	P	500ml	HNO3	-		METALS		
	1	AG	500ml	H2SO4	-		NH3		
	1	P	1000ml	HNO3	-		GAO-ALPHA		

REMARKS:

Shoen Present YES NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other
(Specify)

SAMPLING EQUIPMENT CODES: APP = Anar Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-180, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION J)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Revision Date: February 12, 2009

Revision Date: February 12, 2009

PURGING DATA				
WELL DIAMETER (Inches): 2	TUBING DIAMETER (Inches): 1/4	WELL SCREEN INTERVAL DEPTH (feet): 28.74	STATIC DEPTH TO WATER (feet): 28.74	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOC (ft NGVD): 81.86		GROUNDWATER ELEVATION (ft NGVD): 53.12		
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY				

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME ÷ (TUBING CAPACITY X TUBING LENGTH) ÷ FLOW CELL VOLUME

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 38.08		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 38.08		PURGING INITIATED AT: 1115	PURGING ENDED AT: 1137	TOTAL VOLUME PURGED (gallons): 43.08
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WELL CAPACITY (Gallons Per Foot):	0.75" = 0.02;	1" = 0.04;	1.25" = 0.08;	1.5" = 0.16;	3" = 0.37;	4" = 0.65;	6" = 1.02;	8" = 1.47;	12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.):	1/8" = 0.0006;	3/16" = 0.0014;	1/4" = 0.0026;	5/16" = 0.004;	3/8" = 0.006;	1/2" = 0.010;	5/8" = 0.016		

PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

PUMP OR TUBING DEPTH IN WELL (feet):	32.08	TUBING MATERIAL CODE:	T	FIELD-FILTERED: Y ☒	FILTER SIZE:
				µm	
				Filtration Equipment Type:	

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N(replaced)) DUPLICATE: Y (N)

REMARKS:

Shoen Present: YES (NO)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SAMPLING DATA

REMARKS:

Shoen Present YES NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPF = Reverse Flow Peristaltic Pump; SM = Sitrav Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH; ± 0.2 units Temperature; $\pm 0.2^\circ\text{C}$ Specific Conductance; $\pm 5\%$ Dissolved Oxygen; all readings $\leq 20\%$ saturation (see Table FS 2200-2), optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity; all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24;
GROUNDWATER SAMPLING LOG

SITE NAME: VISTA		SITE LOCATION: APOTKA, FL	
WELL NO: MW-9A	SAMPLE ID:	DATE: 6-7-21	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1.4	WELL SCREEN INTERVAL DEPTH (feet): 43.05	STATIC DEPTH TO WATER (feet): 47.40	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOG (ft NGVD): NA		GROUNDWATER ELEVATION (ft NGVD): NA		
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (63.05 feet - 47.40 feet) X 0.163 gallons/foot = 2.55 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 0.2 gallons + (0.0026 gallons/foot X 63.05 feet) + 0.05 gallons = 0.41 gallons				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 53.05		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 53.05		PURGING INITIATED AT: 0844	PURGING ENDED AT: 0906	TOTAL VOLUME PURGED (gallons): 4.84						
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (micro mhos/cm or µS/cm)	DISSOLVED OXYGEN (micro mhos/cm or µS/cm)	TURBIDITY (NTUs)	ORP (mv)	COLOR	ODOR
0856	2.64	2.64	0.22	47.51	6.63	26.1	82	1.4	4.9	157		
0859	0.66	3.30	0.22	47.51	6.63	26.1	82	1.4	5.2	147		
0902	0.66	3.96	0.22	47.51	6.66	26.0	82	1.3	4.7	151		
0905	0.66	4.62	0.22	47.51	6.64	26.1	82	1.3	4.8	148	None	
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)												

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Acc DAN ARMOUR / PROTECTA		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: 0906	SAMPLING ENDED AT: NR				
PUMP OR TUBING DEPTH IN WELL (feet): 53.05		TUBING MATERIAL CODE: T		FIELD FILTERED: Y (N)	FILTER SIZE: NR				
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N) (replaced)		DUPLICATE: Y (N)					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE gal (min per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	G	40mL	HCl	-	NM	VOA	0.22	BP
	3	G	40mL	NaOH	-		Soil		
	1	P	1000mL	-	-		G-CHEM		
	1	P	500mL	HNO3	-		METALS		
	1	AG	500mL	H2SO4	-		NH3		
	1	P	1000mL	HNO3	-		GROUND ALPHA		
REMARKS: SCREEN: No									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24a

SITE NAME: VISTA		SITE LOCATION: APOKA, FL	
WELL NO: MW-11A	SAMPLE ID:	DATE: 6-7-21	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 3.5 feet to 5.5 feet	STATIC DEPTH TO WATER (feet): 43.74	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOO (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (57.50 feet - 43.24 feet) X 0.163 gallons/foot = 2.24 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= 0.2 gallons + (0.0026 gallons/foot X 52.50 feet) + 0.05 gallons = 0.4 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 49.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 42.50	PURGING INITIATED AT: 0810	PURGING ENDED AT: 0832	TOTAL VOLUME PURGED (gallons): 4.40
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75"=0.02; 1"=0.04; 1.25"=0.08; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.41; 12"=3.68
TURNING INSIDE DIA. CAPACITY (GPM): 1/8"=0.0008; 3/16"=0.0014; 1/4"=0.0028; 5/16"=0.004; 3/8"=0.008; 1/2"=0.010; 5/8"=0.016

PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>ACC</u>	SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>	SAMPLING INITIATED AT: <u>0832</u>	SAMPLING ENDED AT: <u>NR</u>
DAL ARMOUR / PROTECTOR		FIELD FILTERED: <u>X</u> ()	FILTER SIZE: _____

PUMP OR TUBING DEPTH IN WELL (feet): 47.50		TUBING MATERIAL CODE: T		FIELD-FILTERED: Y (N)		Filtration Equipment Type:	
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N) (replaced)		DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE gal (min per minute)	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	3	G	40ml	HCl	-	NM	VOA	0.20	SP
	3	G	40ml	NaOH	-		Boil		
	1	P	1000ml	-	-		G-CHEM		
	1	P	500ml	HNO3	-		METALS		
	1	AG	500ml	H2SO4	-		NH3		
	1	P	1000ml	HNO3	-		GRASS ALPHA		

REMARKS:

SUREN: NO

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ± 0.2 units **Temperature:** $\pm 0.2^{\circ}\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24;

SITE NAME: VISTA		SITE LOCATION: APOKA, FL	
WELL NO: MW-14A	SAMPLE ID:	DATE: 6-7-21	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1 1/4	WELL SCREEN INTERVAL DEPTH: 36 Set to 38.00 ft	STATIC DEPTH TO WATER (feet): 44.98	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOG (ft NGVD): NA			GROUNDWATER ELEVATION (ft NGVD): NA	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= 158.15 feet - 44.98 feet X 0.163 gallons/foot = 21.5 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOLUME = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
$$= 0.2 \text{ gallons} + (0.0026 \text{ gallons/foot} \times 58.15 \text{ feet}) + 0.05 \text{ gallons} = 0.4 \text{ gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 48.15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 48.15	PURGING INITIATED AT: 0920	PURGING ENDED AT: 0940	TOTAL VOLUME PURGED (gallons): 4.40
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING BORE CAPACITY (GPM): 4 1/8" = 0.0006; 3 1/8" = 0.0014; 1 3/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.019

PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLING DATA	
SAMPLED BY (PRINT) / AFFILIATION: Ace	SAMPLER(S) SIGNATURE(S):  SAMPLING INITIATED AT: 0940 SAMPLING ENDED AT: NR

DAN ARMOUR / PROJECT		FIELD-FILTERED: Y (N) FILTER SIZE:	
PUMP OR TUBING DEPTH IN WELL (feet) 49.15		TUBING MATERIAL CODE: T	
Filtration Equipment Type:		Filtration Equipment Type:	

FIELD DECONTAMINATION:		PUMP	Y	(N)	TUBING	Y	(R)(replaced)	DUPLICATE:	Y	(N)
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SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE gal (ml) per minute	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
	3	G	40ml	HCl	-	NM	VOA	0.22	SP
	3	G	40ml	NaOH	-		BOLL		
	1	P	1000ml	-	-		G-CHEM		
	1	P	500ml	HNO3	-		METALS		
	1	AG	500ml	H2SO4	-		NH3		
	1	P	1000ml	HNO3	-		GRDS ALPAA		

REMARKS:

SURE: No

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baler; BP = Bladder Pump; ESP = Electric Submersible Pump;
RPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: $\pm 0.2^\circ\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) Turbidity: all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: VISTA		SITE LOCATION: APOKA, FL	
WELL NO: MW-15A	SAMPLE ID:		DATE: 6-7-21

PURGING DATA

WELL DIAMETER (Inches): 2	TUBING DIAMETER (Inches): 1/4	WELL SCREEN INTERVAL DEPTH: 49.3 feet to 69.3 feet	STATIC DEPTH TO WATER (feet): 42.14	PURGE PUMP TYPE OR BAILER: BP
WELL ELEVATION TOO (R NGVD): NA		GROUNDWATER ELEVATION (R NGVD): NA		
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY				
(only fill out if applicable)				
= 169.30 feet - 42.14 feet X 0.143 gallons/foot = 4.43 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME				
(only fill out if applicable)				
= 0.2 gallons + (0.0026 gallons/foot X 69.30 feet) + 0.05 gallons = 0.33 gallons				

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:		SAMPLING ENDED AT:	
DAN ARMOUR / PFD-TECH		<i>[Signature]</i>		0759		NR	
PUMP OR TUBING DEPTH IN WELL (feet):		TUBING MATERIAL CODE:		FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE:	
64.30		T		µm			
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)				DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION		INTENDED ANALYSIS AND/OR METHOD	SAMPLE PUMP FLOW RATE gal (mt. per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	SAMPLING EQUIPMENT CODE
	3	G	40ml	HCl	-	NM	BP
	3	G	40ml	NaOH	-		
	1	P	1000ml	-	-		
	1	P	500ml	HNO3	-		
	1	AG	500ml	H2SO4	-		
	1	P	1000ml	HNO3	-		
REMARKS:							
SHEEN: No							
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)							
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)							

NOTES: 1. The above do not constitute all of the information required by Chapter 82-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: $\pm 0.2^\circ\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2);
optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) Turbidity: all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

Revision Date: February 12, 2009

Revision Date: February 12, 2009

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2).
optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)
Revision Date: February 12, 2009

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2).
optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)
Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: VISTA		SITE LOCATION: APOPKA FL	
WELL NO: EQUIPMENT BLANK	SAMPLE ID:		DATE: 6-8-21

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: DANNY ARMOUR / ALL				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 0830		SAMPLING ENDED AT: NA	
PUMP OR TUBING DEPTH IN WELL (feet): NA				TUBING MATERIAL CODE: NA			FIELD-FILTERED: Y (N)		FILTER SIZE: µm	
FIELD DECONTAMINATION: PUMP Y N NA TUBING Y N (replaced)							DUPLICATE: Y (N)			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	3	CG	40 ml	NaOH	-	-	VOA		NA	
	1	PE	250 ml	HNO3	-	-	METALS		NA	
	1	PE	250 ml	H2SO4	-	-	NH3		NA	
	1	PE	250 ml	-	-	-	TD3		NA	
	1	PE	125 ml	-	-	-	Cl-		NA	
	1	PE	125 ml	-	-	-	ACK		NA	
REMARKS: SAMP: No. EB - COMPLETED WITH D.I. H2O PROVIDED BY PAGE LAB										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Atlantic Coast Consulting, Inc.
1150 Northmeadow Parkway, Ste 100
Roswell, Georgia 30076
(770) 715-8090

DEPTH TO WATER MEASUREMENTS

FACILITY: VISTA

DATE: 6-7-21

MW-01A	44.85
MW-01B	55.37
MW-02AR	34.53
MW-02B	37.33
MW-03A	41.63
MW-03B	41.87
MW-04A	30.39
MW-04B	30.57
MW-05A	28.74
MW-05B	30.59
MW-06AR	52.40
MW-06BR	52.28
MW-07A	42.56
MW-07B	56.43
MW-08R	45.91
MW-FLO1	41.95
MW-FLO2R	32.82
MW-FLO3	46.83
MW-09A	47.40

[illegible]

Atlantic Coast Consulting, Inc.
1150 Northmeadow Parkway, Ste 100
Roswell, Georgia 30076
(770) 715-8090

DEPTH TO WATER MEASUREMENTS

FACILITY: VISTA

DATE: 6-8-21

[illegible][illegible]



WELL CONDITION INSPECTION FORM

Site: VISTA

Personnel: DANNY ARMOUR

Date: 6-7-21

Page 1 of 2

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations *
MW-01A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	DEDICATED BLADDER PUMP	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-02AR	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-03A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-04A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-05A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-06AR	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-07A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-09A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-11A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
MW-11TA	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	"	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.
Return this form to Site Manager - FOR INTERNAL USE ONLY.



WELL CONDITION INSPECTION FORM

Site: VISTA Personnel: DANNY ARMOUR

Date: 6-7-21

Page 2 of 2

Well ID	Protective Casing	Well Casing	Label	Lock	Sample Equipment Type	General Turbidity	Well Yield	Comments/Observations *
WV-15A	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	DEDICATED BLADDER PUMP	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
WV-DBR	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	NON-DEDICATED BLADDER PUMP	☒ Clear ☐ Turbid	☒ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	
	☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No		☐ Clear ☐ Turbid	☐ OK ☐ Inadequate	

* Note ponding water, weep holes, or any other information pertaining to well condition. Provide additional details on listed items.
Return this form to Site Manager - FOR INTERNAL USE ONLY.



Daily Instrument Calibration Log

SITE: VISTA / PINE RIDGE
TECHNICIAN: DANNY ARMOUR

WATER LEVEL: SOLINIST
WATER LEVEL S/N: 377052

INSTRUMENT S/N: P8C5GTU2
INSTRUMENT TYPE: HORIBA V-52
CAL. SOLUTIONS: ID: STANDARD LOT #: 20180248 EXP. DATE: 5/21
ID: TURBIDITY LOT #: 5202010463 EXP. DATE: 5/21
ID: _____ LOT #: _____ EXP. DATE: _____
ID: _____ LOT #: _____ EXP. DATE: _____
ID: _____ LOT #: _____ EXP. DATE: _____
ID: _____ LOT #: _____ EXP. DATE: _____
ID: _____ LOT #: _____ EXP. DATE: _____

VISTA

Calibration Date: 6-7-21
RDO: 100% sat. = 100%
PH: 4.00 = Auto 7.00 = Auto 10.00 = Auto
CONDUCTIVITY: Auto
ORP (mV) Auto

VISTA

Calibration Date: 6-8-21
RDO: 100% sat. = 100%
PH: 4.00 = Auto 7.00 = Auto 10.00 = Auto
CONDUCTIVITY: Auto
ORP (mV) Auto

Calibration Date: _____
RDO: 100% sat. = _____
PH: 4.00 = _____ 7.00 = _____ 10.00 = _____
CONDUCTIVITY: _____
ORP (mV) _____

Calibration Date: _____
RDO: 100% sat. = _____
PH: 4.00 = _____ 7.00 = _____ 10.00 = _____
CONDUCTIVITY: _____
ORP (mV) _____

Calibration Date: _____
RDO: 100% sat. = _____
PH: 4.00 = _____ 7.00 = _____ 10.00 = _____
CONDUCTIVITY: _____
ORP (mV) _____

APPENDIX B
COMPACT DISK CONTAINING
REPORT IN .PDF FORMAT
AND
ADaPT FILE