May 29, 2020

Alexis McKinnon
Solid Waste Specialist
Kitsap County Public Works
Solid Waste Division
604 Division Street, MS-27
Port Orchard, WA 98366

Re: First Quarter 2020 Environmental Monitoring Report, Hansville Landfill, Kitsap County, Washington
Project No. 160423-004-05.1

Dear Alexis:

This quarterly report summarizes the results of environmental monitoring conducted at the Hansville Landfill (Site) during the first quarter of 2020, and was prepared by Aspect Consulting, LLC (Aspect) on behalf of Kitsap County Public Works Solid Waste Division and Waste Management of Washington (WMW). Ongoing environmental monitoring at the Site supports the selected remedy of natural attenuation of groundwater with enhanced monitoring and institutional controls that was established under Amended Consent Decree No. 95-2-03005-1 (August 5, 2011). The data sets presented in this letter report were collected in accordance with the Site Cleanup Action Plan (CAP; Ecology, 2011) and the "Compliance Monitoring Plan with Sampling & Analysis Plan and Quality Assurance Plan" (SCS, 2011; herein referred as Compliance Monitoring Plan), except where otherwise noted.

Conditions monitored at the Site during the first quarter of 2020 were consistent with historical trends showing improvements in protection of human health and the environment. This report is organized consistent with quarterly reporting topics listed in the Compliance Monitoring Plan (SCS, 2011), and includes:

- Site monitoring and maintenance activities, along with a discussion of any deviations from the CAP, or required tasks not otherwise documented in project plans
- Landfill gas monitoring results and gas collection system adjustments
- Determination of groundwater flow direction and gradient, including a groundwater surface elevation contour map
- Water quality sampling results, including tabulated field data and laboratory analyses

Also included are time-series plots and projected trends in groundwater concentrations for selected analytes at selected monitoring locations. Finally, this report discusses geochemical parameters as indicators of landfill effects on groundwater and surface water.

Site Activities – First Quarter 2020

Site activities during the reporting period included environmental monitoring of landfill gas, groundwater, and surface water. Landfill gas monitoring data are presented in Attachment A. Groundwater elevations, a groundwater contour map, and groundwater and surface water quality analytical results are presented in Attachment B. Summary statistics, time-series graphs, and graphs of projected groundwater concentrations for arsenic and vinyl chloride at selected monitoring wells are presented in Attachment C. Supporting field records, laboratory data reports, and chain-of-custody documentation are presented in Attachment D. A chronology of on-Site monitoring activities performed during the first quarter 2020 is provided below:

- On January 16, 2020, Aspect conducted system tuning of the landfill gas system. As necessary, flow rates were adjusted to ensure capture of landfill gasses.
- On January 22, 2020, groundwater and surface water sampling was completed by Aspect representatives. Groundwater and surface water samples were collected in accordance with the Compliance Monitoring Plan (SCS, 2011).
- On February 20, 2020 Aspect conducted monthly monitoring at the system flare compound inlet and landfill gas condensate collection system.
- On March 19, 2020, Aspect conducted landfill gas monitoring in accordance with the Compliance Monitoring Plan (SCS, 2011), including compliance monitoring at perimeter probes. As necessary, flow rates were adjusted to ensure capture of landfill gasses.

Deviations from the Compliance Monitoring Plan

The flow rate at the blower inlet was inadvertently not measured during the March landfill gas monitoring event. The average flow rates observed during other monitoring events were reported.

The pH meter malfunctioned during the January groundwater and surface water sampling event, and these data were not reported for four samples (MW-6, SW-1, SW-4, and SW-6).

There were no other deviations from the Compliance Monitoring Plan (SCS, 2011) during the first quarter 2020 environmental monitoring.

Summary of Landfill Gas Conditions

The following sections provide a discussion of landfill gas monitoring and gas extraction system performance. The layout of the landfill gas extraction system is shown on Figure A-1.

Landfill Gas Monitoring

The landfill gas collection system was tuned on January 16, 2020, the flare inlet was inspected on February 20, 2020, and compliance monitoring of the landfill gas collection system occurred on March 19, 2020.

Measurements were made with a calibrated GEM-5000 multigas meter. Landfill gas monitoring parameters collected for the compliance monitoring event are summarized in Table A-1, and listed below:

- Landfill gas composition measurements included methane (CH_4), carbon dioxide (CO_2), oxygen (O_2), and balance gas (Balance) concentrations.
- Collection system pressure measurements included the static pressure measured before and after any valve adjustments, reported as "initial" and "adjusted," respectively.
- Collection system flow-rate measurements were obtained at all locations via orifice plates. The differential pressure and gas temperature were measured to calculate flow. Table A-1 presents flow rates measured after valve adjustments, reported as "adjusted."

Landfill Gas System Performance

During the compliance monitoring event on March 19, 2020, observed conditions remained within the normal range. Methane and carbon dioxide concentrations at the blower inlet were approximately 3.1 percent by volume and 12.5 percent by volume, respectively. Oxygen concentration was approximately 5.6 percent by volume. Flow rates were approximately 67 standard cubic feet per minute (scfm) during the first quarter. Wellfield optimization will continue to focus on maximizing methane and carbon dioxide collection rates. The 2,000-gallon condensate storage tank contained approximately 750 gallons at the end of the first quarter of 2020.

Based on the consistent performance of the landfill gas collection system and in consultation with the County and WMW, landfill gas wellfield monitoring and tuning will be conducted on a quarterly basis, during the third month of the quarter (March, June, September, December). Monthly site visits will include monitoring the flare inlet and condensate management system and visual inspection of the wellfield. If flare inlet readings are outside the normal range, then troubleshooting measures may include wellfield monitoring and tuning. Any damaged wellheads or wellheads with sagging flexible hose will be repaired to maintain optimal landfill gas system performance.

Explosive Gas Control

Methane was not detected in any of the compliance gas probes during the compliance monitoring event on March 19, 2020. Locations of on-property compliance probes GP-1, GP-2S, GP-2M, GP-2D, GP-3, GP-4, GP-5, and GP-6 are shown on Figure A-1, and the location of off-property compliance probe GP-7 is shown on Figure B-1. Carbon dioxide concentrations ranged from 0.1 to 3.7 percent by volume, reflecting natural conditions.

Summary of Groundwater and Surface Water Conditions

This section addresses groundwater and surface water conditions based on the monitoring event on January 22, 2020. Samples were collected from six groundwater monitoring wells and from four surface water monitoring locations (see Figure B-1) for laboratory analysis.

Groundwater Flow

Groundwater flow conditions during the first quarter of 2020 were consistent with those observed during previous monitoring events. Groundwater surface elevations were calculated using water levels measured January 22, 2020 (see Table B-1). Groundwater elevations ranged from 238.2 feet North American Vertical Datum of 1988 (NAVD88) in MW-12I to 266.8 feet NAVD88 in the

upgradient, background monitoring well MW-5. The direction of groundwater flow at the Site was to the southwest. Groundwater gradients ranged from 0.007 feet over feet (feet/feet) in the upgradient areas, to 0.014 feet/feet further downgradient, with the gradient steepening near the groundwater discharge area (Figure B-1).

Groundwater and Surface Water Quality

Groundwater quality results from the first quarter 2020 are presented in Table B-2, including field parameters, conventional parameters, dissolved metals, and volatile organic compounds. During the reporting period, arsenic concentrations in groundwater were below the Site-specific cleanup level of 0.005 milligrams per liter (mg/L) at all monitoring wells except MW-14 (0.012 mg/L). Dissolved manganese concentrations were below the Site-specific cleanup level of 2.24 mg/L. Vinyl chloride concentrations in groundwater were below the Site-specific groundwater cleanup level of 0.025 micrograms per liter (µg/L) at all monitoring wells except MW-6 (0.12 µg/L) and MW-12I (0.12 µg/L).

Surface water quality results from the first quarter 2020 are presented in Table B-3, including field parameters, conventional parameters, dissolved metals, and volatile organic compounds. During the reporting period, dissolved arsenic concentrations in surface water were below the Site-specific cleanup level of 0.005 mg/L. Dissolved manganese concentrations were below the Site-specific cleanup level of 2.24 mg/L. Vinyl chloride concentrations in surface water were not detected at a reporting limit below the Site-specific cleanup level of 0.025 µg/L.

Time-Series Plots and Projected Trends

Groundwater sampling results since 2007 are shown on time-series plots for dissolved arsenic (Figure C-1) and vinyl chloride (Figure C-2) at all compliance monitoring locations. Figure C-1 shows that dissolved arsenic concentrations in groundwater have been less than the cleanup level of 0.005 mg/L at MW-5 (background well), MW-6, MW-7, and MW-12I. Dissolved arsenic concentrations have historically been below the cleanup level at MW-13D except occasionally during 2018 and 2019. Dissolved arsenic concentrations at MW-13D were below the Site-specific cleanup level during the first quarter 2020. Dissolved arsenic concentrations at MW-14 have historically exceeded the Site-specific cleanup level and have been decreasing over time.

Figure C-2 shows vinyl chloride concentrations in groundwater have been less than the cleanup level of 0.025 µg/L at MW-5 (background well), MW-7, and MW-13D. The concentrations of vinyl chloride at MW-6, MW-12I, and MW-14 have historically exceeded the Site-specific cleanup level and have been decreasing over time. Vinyl chloride concentrations at MW-14 were below the Site-specific cleanup level during the first quarter of 2020.

Figure C-3 shows time-series plots of historical and 10-year projected groundwater concentrations for MW-6 (vinyl chloride), MW-12I (vinyl chloride), MW-14 (vinyl chloride and arsenic), and MW-13D (arsenic). The projected restoration time frames for vinyl chloride concentrations range from approximately 4 to 10 years. The projected restoration time frame for arsenic in groundwater at MW-14 is more than 10 years. Maintaining landfill gas collection performance may achieve groundwater cleanup levels within a shorter time frame than shown on Figure C-3.

Statistical Evaluation of Groundwater Trends

Statistically significant decreasing trends in dissolved arsenic and/or vinyl chloride concentrations were identified at monitoring wells MW-6, MW-12I, and MW-14. We attribute the decreasing trends to the cleanup actions at the Site, and project concentrations will continue to decrease to Site-specific cleanup levels as described above and shown in Figure C-3.

A statistically significant increasing trend in dissolved arsenic concentrations was identified at monitoring well MW-13D. Dissolved arsenic concentrations recently exceeded the Site-specific cleanup levels and remain below the regional natural background value provided by Ecology (Ecology, 2016) as shown in Figure C-3. The statistical trend analysis for dissolved arsenic concentrations in MW-13D was first conducted as part of the 2019 Annual Environmental Monitoring Report (Aspect, 2020) which includes an evaluation of potential sources. Based on the data available, it is likely that arsenic concentrations since 2007 reflect natural variations or off-Site influences, as opposed to effects from the Hansville Landfill Site. Dissolved arsenic concentrations in MW-13D and other locations will continue to be closely monitored and evaluated.

Table C-1 provides results of statistical analysis for arsenic and vinyl chloride for monitoring wells MW-6, MW-12I, MW-13D, and MW-14. The trends are defined as "statistically significant" because the magnitude of the Mann-Kendall Test Value (Z) was greater than the Critical Value (which is based on the number of data points and alpha). The trend is defined as decreasing where the Sen's Slope is negative or increasing where the Sen's Slope is positive.[1] These statistics confirm what is visually apparent on Figure C-3 showing historical groundwater concentrations.

The statistical analysis of groundwater data was performed in accordance with the Compliance Monitoring Plan (SCS, 2011) for historical data collected since January 23, 2007. The program Sanitas WQStat (ver. 9.0.34) was used to evaluate the Mann-Kendall Test and Sen's Slope. Mann-Kendall testing was performed to assess whether there were statistically significant trends in groundwater concentrations using the two-tailed test (alpha = 0.05). Mann-Kendall results are reported as an approximated normal distribution Test Value "Z" (where the number of data points was greater than 40). Sen's slope analysis was performed to identify the trend direction for statistically significant trends and reflects the median of the slopes of all pairs of historical data.

Geochemical Parameters

Geochemical parameters in groundwater and surface water serve as indicators of landfill effects and can distinguish leachate impacts from gas-to-groundwater impacts. As shown in Tables B-2 and B-3, geochemical parameters collected at the Site include field parameters (dissolved oxygen, pH, Redox [reduction-oxidation potential], specific conductivity, and temperature), alkalinity/carbonate/bicarbonate, chloride, nitrate/nitrite/ammonia, sulfate, and total organic carbon.

Based on low concentrations of geochemical parameters identified as leachate indicators (such as chloride, sulfate, alkalinity, and bicarbonate) across the Site, there appears to be little if any leachate effect on groundwater and surface water quality. However, the downgradient monitoring wells show lower dissolved oxygen concentrations than the upgradient well (MW-5), which is

[1] Sen's slope values reflect the median of the slopes of historical data pairs, and were provided in units of µg/L per day in reports by SCS through 2016. Starting in 2017, Sen's slope values will be provided in units of µg/L per year, to support interpretation. For comparison, Table C-1 provides Sen's slope values for both units.

likely caused by carbon dioxide in landfill gas coming in contact with groundwater directly beneath the landfill. Increasing the rate of landfill gas collection may prevent carbon dioxide from contacting groundwater, maintain background dissolved oxygen levels, and support geochemical conditions that keep naturally occurring arsenic and manganese from dissolving into groundwater.

References

SCS Engineers (SCS), 2011, Compliance Monitoring Plan with Sampling & Analysis Plan and Quality Assurance Plan – Remedial Action at the Hansville Landfill, September 15, 2011.

Washington State Department of Ecology (Ecology), 2011, Cleanup Action Plan Hansville Landfill, Kitsap County, Washington, Ecology Facility Site Identification Number: 2605, June 2011.

Washington State Department of Ecology (Ecology), 2016, Natural Background Groundwater Arsenic Concentrations in Washington State, Ecology Publication No. 14-09-044, March 2016.

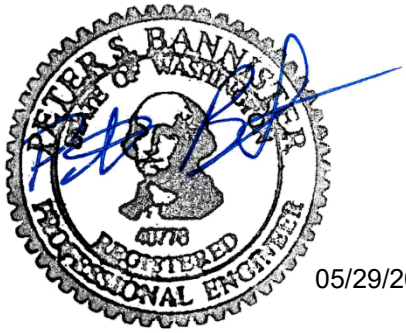
Limitations

Work for this project was performed for the Kitsap County Public Works (Client), and this letter was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This letter does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Sincerely,

Aspect consulting, LLC



05/29/2020

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Attachments:
A – Landfill Gas Data
B – Water Quality Results
C – Groundwater Statistics and Time-Series Plots
D – Field Forms and Laboratory Reports

cc: Phil Perley, Waste Management of Washington
Patrick Hamel, Kitsap Public Health District
Ron Timm, Washington State Department of Ecology
Sam Phillips, Port Gamble S'Klallam Tribe

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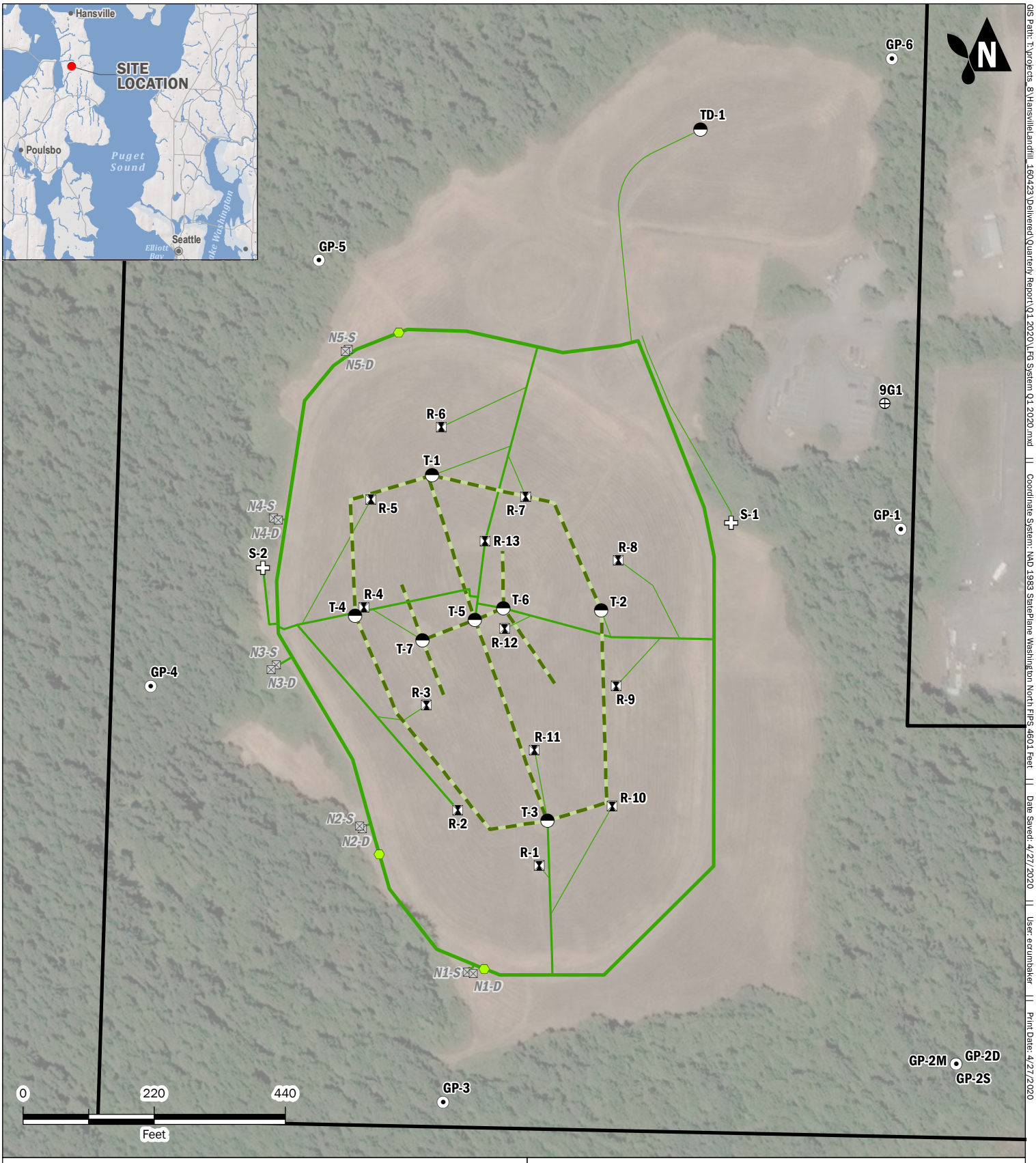
ATTACHMENT A

Landfill Gas Data



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Exploration

- Condensate Sump
- Gas Detection Probe
- Gas Extraction Well (Native Soil Completion) *Disconnected in October, 2019*
- Gas Extraction Well (in Refuse Completion)
- Trench Completion
- Well Geologic Control

Landfill Gas System

- LFG Pipe - 2"
- LFG Pipe - 4"
- LFG Pipe - 6"
- Trench
- LFG Valve
- Landfill Boundary

Landfill Gas System

First Quarter 2020 Environmental Monitoring Report
Hansville Landfill
Kitsap County, Washington

Aspect Consulting	JAN - 2020	BY: MLK / RAP	FIGURE NO. A-1
	PROJECT NO. 160423	REVISED BY: ---	

Table A-1. Landfill Gas Data, First Quarter, 2020

Project No. 160423, Hansville Landfill, Hansville, WA

Location	Device ID	Date/Time	Methane CH4 (% by vol)	Carbon Dioxide CO2 (% by vol)	Oxygen O2 (% by vol)	Balance Bal (% by vol)	Static Pressure (inches H2O)		Gas Temperature (degrees F)		Flow Rate (SCFM)	
							Initial	Adjusted	Initial	Adjusted	Initial	Adjusted
Blower Inlet	HANSBLIN	3/19/20 9:30	3.1	12.5	5.6	78.8	-5.3	-5.3	44.9	44.9	67	67
Blower Outlet	HANSBLOT	3/19/2020 9:26	3.1	12.6	5.5	78.8	N/A	N/A	63.2	N/A	N/A	N/A
Extraction Well 001	HANSR001	3/19/2020 11:56	8.6	14.7	0.1	76.6	-1.25	-1.25	52.7	52.7	0.8	1.1
Extraction Well 002	HANSR002	3/19/2020 10:52	2	13.7	5.2	79.1	N/A	N/A	60.5	N/A	N/A	N/A
Extraction Well 003	HANSR003	3/19/2020 11:02	8.7	17.5	0.1	73.7	-1.51	-1.51	48.4	48.4	1.5	1.9
Extraction Well 004	HANSR004	3/19/2020 11:16	3.6	17.4	0.1	78.9	-2.25	-2.25	61.6	61.6	2.3	2.3
Extraction Well 005	HANSR005	3/19/2020 11:26	4.5	18.4	0.2	76.9	-1.64	-1.64	66	66	3	2.6
Extraction Well 006	HANSR006	3/19/2020 9:57	3.5	15.4	4.3	76.8	-2.48	-2.48	68.7	68.7	3.5	3.5
Extraction Well 007	HANSR007	3/19/2020 10:03	0.4	16	0.3	83.3	-1.37	-1.37	62.6	62.6	2.8	2.7
Extraction Well 008	HANSR008	3/19/2020 10:10	6	17.6	0	76.4	-1.37	-1.37	50	50	1.8	0.9
Extraction Well 009	HANSR009	3/19/2020 10:20	1.8	14.4	2.7	81.1	N/A	N/A	62.4	N/A	N/A	N/A
Extraction Well 010	HANSR010	3/19/2020 10:25	6	10.8	4.2	79	-1.5	-1.5	50.5	50.5	0.8	0.5
Extraction Well 011	HANSR011	3/19/2020 10:30	4.1	9	0	86.9	-1.47	-1.47	49.3	49.3	0.8	0.8
Extraction Well 012	HANSR012	3/19/2020 11:47	10.7	4.8	0	84.5	-1.53	-1.53	49.3	49.3	1.5	0
Extraction Well 013	HANSR013	3/19/2020 11:37	3.7	13.3	2.2	80.8	N/A	N/A	54.6	N/A	N/A	N/A
Trench Collector TD-1	HANSTD01	3/19/2020 9:41	1.7	18.8	1	78.5	-4.52	-4.52	59.6	59.6	0	0
Trench Collector TR-1	HANSTR01	3/19/2020 10:47	0.1	0.4	21.5	78	-1.26	-1.26	49	49	0.5	0.5
Trench Collector TR-2	HANSTR02	3/19/2020 10:16	7.1	16.2	0.5	76.2	N/A	N/A	48.7	N/A	N/A	N/A
Trench Collector TR-3	HANSTR03	3/19/2020 10:35	0.1	0.2	21.5	78.2	N/A	N/A	46.4	N/A	N/A	N/A
Trench Collector TR-4	HANSTR04	3/19/2020 11:20	1.2	17.7	0.1	81	-1.42	-1.42	51	51	2.6	2.6
Trench Collector TR-5	HANSTR05	3/19/2020 11:50	0.2	0.4	20.9	78.5	N/A	N/A	51.6	N/A	N/A	N/A
Trench Collector TR-6	HANSTR06	3/19/2020 11:42	3.9	8.4	10.9	76.8	N/A	N/A	52.4	N/A	N/A	N/A
Trench Collector TR-7	HANSTR07	3/19/2020 11:11	8.1	16.2	0.1	75.6	-1.44	-1.44	50.1	50.1	3.3	3.4
Native Soil Extraction Well 1 Shallow	HANSN01S	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 1 Deep	HANSN01D	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 2 Shallow	HANSN02S	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 2 Deep	HANSN02D	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 3 Shallow	HANSN03S	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 3 Deep	HANSN03D	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 4 Shallow	HANSN04S	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 4 Deep	HANSN04D	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 5 Shallow	HANSN05S	--	--	--	--	--	--	--	--	--	--	--
Native Soil Extraction Well 5 Deep	HANSN05D	--	--	--	--	--	--	--	--	--	--	--
Gas Probe 1	HANSGP01	3/19/2020 15:36	0	0.7	20.9	78.4	N/A	N/A	61.2	N/A	N/A	N/A
Gas Probe 2 Shallow	HANSGP2S	3/19/2020 14:47	0	0.1	21.1	78.8	N/A	N/A	62.2	N/A	N/A	N/A
Gas Probe 2 Middle	HANSGP2M	3/19/2020 14:57	0	1.3	19.4	79.3	N/A	N/A	61.6	N/A	N/A	N/A
Gas Probe 2 Deep	HANSGP2D	3/19/2020 15:13	0	0.1	21.4	78.5	N/A	N/A	60.9	N/A	N/A	N/A
Gas Probe 3	HANSGP03	3/19/2020 14:24	0	1.3	20.2	78.5	N/A	N/A	59.4	N/A	N/A	N/A
Gas Probe 4	HANSGP04	3/19/2020 13:36	0	1.9	19.7	78.4	N/A	N/A	58.7	N/A	N/A	N/A
Gas Probe 5	HANSGP05	3/19/2020 13:05	0	1.3	20.2	78.5	N/A	N/A	58.1	N/A	N/A	N/A
Gas Probe 6	HANSGP06	3/19/2020 12:42	0	3.7	17.9	78.4	N/A	N/A	54.8	N/A	N/A	N/A
Gas Probe 7	HANSGP07	3/19/2020 14:02	0	3	18.4	78.6	N/A	N/A	59.5	N/A	N/A	N/A

Notes

Static pressures and flow rates were inadvertently not recorded on March 19, 2020. Values reported represent averages of other monitoring events.

Flow rates measured using orifice plates (where installed).

N/A = indicates parameter not measured.

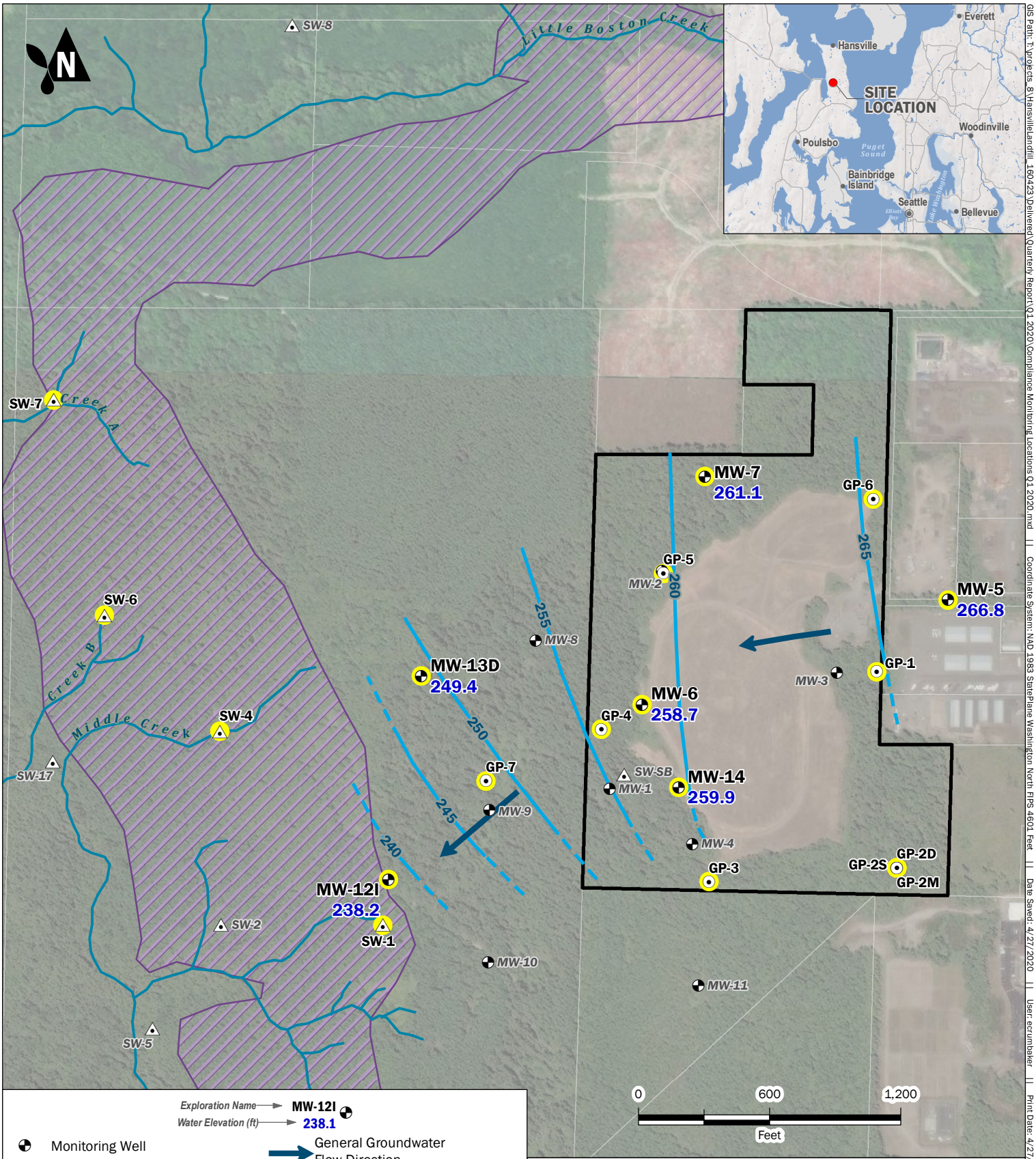
inches H2O = inches water column

degrees F = degrees Fahrenheit

(--) = indicates location was not monitored and has been decommissioned due to little to no landfill gas collection

ATTACHMENT B

Water Quality Results



Note: Vertical datum is NAVD88. Approximate area of groundwater discharge from upper aquifer delineation from Remedial Investigation Report (Parametrix, 2006).

Compliance Monitoring Locations

First Quarter 2020 Environmental Monitoring Report
Hansville Landfill
Kitsap County, Washington

Aspect Consulting	APR-2020	BY: MLK / RAP	FIGURE NO. B-1
	PROJECT NO. 160423	REVISED BY: WEG	

GIS Path: T:\projects_8\Hansvillelandfill_160423\Delivered\Quarterly Report\Q1 2020\Compliance Monitoring Locations Q1 2020.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 4/27/2020 || User: ecrumbaker || Print Date: 4/27/2020

Table B-1. Water Level Elevations

Project No. 160423, Hansville Landfill, Hansville, WA

Well	Ground Elevation (ft NAVD88)	Top of Casing Elevation (ft NAVD88)	Screen Elevation (ft NAVD88)		Depth to Water (ft)	Water Level Elevation (ft NAVD88)
			Top	Bottom		
MW-5	363.7	366.9	244	234	100.07	266.8
MW-6	332.0	332.7	260	245	74.02	258.7
MW-7	344.3	346.0	259	244	84.93	261.1
MW-12I	245.6	248.1	217	207	9.88	238.2
MW-13D	258.1	260.4	205	195	11.05	249.4
MW-14	338.6	341.1	262	247	81.17	259.9

Notes

Depths to water collected January 22, 2020.

Elevations relative to North American Vertical Datum of 1988 (NAVD88).

ft = feet

Table B-2. Groundwater Quality Results

Project No. 160423, Hansville Landfill, Hansville, WA

			Location	MW-5	MW-6	MW-7	MW-12I	MW-13D	MW-14
			Date	01/22/2020	01/22/2020	01/22/2020	01/22/2020	01/22/2020	01/22/2020
Parameter	**Units**	**Site Cleanup Level**							
Field Parameters									
Dissolved Oxygen	mg/L			**8.53**	**0.96**	**0.71**	**0.31**	**0.4**	**0.31**
pH	pH units			**7.08**	**--**	**6.41**	**6.78**	**7.22**	**6.7**
Redox	mV			**73.2**	**-244**	**79.4**	**68.9**	**83.2**	**68.4**
Specific Conductivity	uS/cm			**160**	**321.5**	**215**	**143.8**	**181.7**	**175.3**
Temperature	deg C			**10**	**12.2**	**9.3**	**9.3**	**9.5**	**10.8**
Turbidity	NTU			**0.55**	**0.55**	**2.04**	**0.27**	**1.81**	**0.5**
Conventionals									
Alkalinity	mg/L			**69**	**170**	**120**	**74**	**75**	**86**
Ammonia (as N)	mg/L			0.030 U	**0.030 J**	0.030 U	0.030 U	0.030 U	0.030 U
Bicarbonate	mg/L			**69**	**170**	**120**	**74**	**75**	**86**
Carbonate	mg/L			10 U	10 U	10 U	10 U	10 U	10 U
Chloride	mg/L			3.0 U	**3.6**	3.0 U	3.0 U	**4.3**	3.0 U
Nitrate (as N)	mg/L			**2.37**	**0.523**	**0.26**	0.100 U	0.100 U	0.100 U
Nitrite (as N)	mg/L			0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
Orthophosphate (as P)	mg/L			0.10 R	0.10 R	0.10 R	0.10 R	0.10 R	0.10 R
Sulfate	mg/L			**6.8**	**21**	5.0 U	5.0 U	**13**	**7.3**
Total Organic Carbon	mg/L			1.0 U	**1.2**	**1.7**	**2.2**	1.0 U	**1.6**
Dissolved Metals									
Arsenic	mg/L	0.005		**0.00183**	**0.00171**	**0.00121**	**0.00243**	**0.00486**	**0.012**
Manganese	mg/L	2.24		0.0010 U	**0.42**	0.0010 U	**0.03**	**0.0056**	**1.5**
Volatile Organic Compounds									
1,2-Dichloroethene (total)	ug/L			2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**2**
cis-1,2-Dichloroethene	ug/L			1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**2**
Vinyl Chloride	ug/L	0.025		0.020 U	**0.12**	0.020 U	**0.12**	0.020 U	**0.022**

Notes

Samples were collected on April 17, 2019.
Bold = Detected
Shaded = Exceeded Site Cleanup Level
U = Not detected at or above reporting limit
J or UJ = Estimated "usable"
R = Rejected. Orthophosphate results R flagged due to hold time exceedance.

mV = millivolts
µS/cm = microSiemens per centimeter
deg C = degrees Celcius
NTU = Nephelometric Turbidity Units

mg/L = milligram per liter
µg/L = microgram per liter
(--) = pH meter malfunction

Table B-3. Surface Water Quality Results

Project No. 160423, Hansville Landfill, Hansville, WA

			Location	SW-1	SW-4	SW-6	SW-7
			Date	01/22/2020	01/22/2020	01/22/2020	01/22/2020
Parameter	Units	Site Cleanup Level					
Field Parameters							
Dissolved Oxygen	mg/L			**10.36**	**10.77**	**10.94**	**11.54**
pH	pH units			**--**	**--**	**--**	**5.1**
Redox	mV			**-23.4**	**-57.8**	**-61.4**	**67.2**
Specific Conductivity	uS/cm			**161.9**	**229.2**	**87.3**	**126.9**
Temperature	deg C			**8.55**	**7.3**	**6.7**	**7.1**
Turbidity	NTU			**2.65**	**27.9**	**20.4**	**5.29**
Conventionals							
Alkalinity	mg/L			**70**	**110**	**31**	**37**
Ammonia (as N)	mg/L			0.030 U	0.030 U	**0.037 J**	**0.039 J**
Bicarbonate	mg/L			**70**	**110**	**31**	**37**
Carbonate	mg/L			10 U	10 U	10 U	10 U
Chloride	mg/L			**3.8**	**7.7**	**3.3**	**3.3**
Nitrate (as N)	mg/L			**2.12**	**1.2**	**1.04**	**3.7**
Nitrite (as N)	mg/L			0.100 U	0.100 U	0.100 U	0.100 U
Orthophosphate (as P)	mg/L			0.10 R	0.10 R	0.10 R	0.10 R
Sulfate	mg/L			**7.8**	**10**	5.0 U	**6**
Total Organic Carbon	mg/L			**3.6**	**15**	**27**	**14**
Dissolved Metals							
Arsenic	mg/L	0.005		**0.00156**	**0.00192**	**0.00212**	**0.00103**
Manganese	mg/L	2.24		0.0010 U	**0.036**	**0.035**	**0.0036**
Volatile Organic Compounds							
1,2-Dichloroethene (total)	ug/L			2.0 U	2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	ug/L			1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	ug/L	0.025		0.020 U	0.020 U	0.020 U	0.020 U

Notes

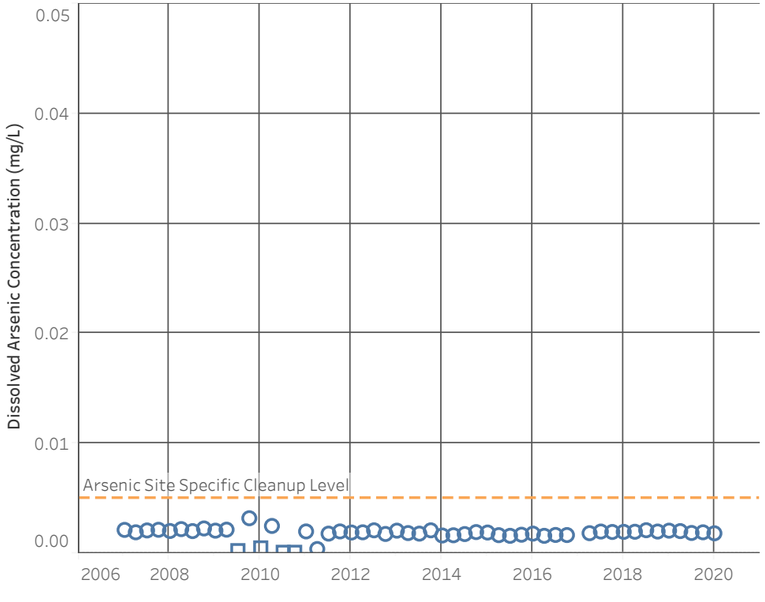
Samples were collected on April 17, 2019.
Bold = Detected
Shaded = Exceeded Site Cleanup Level
U = Not detected at or above reporting limit
J or UJ = Estimated "usable"
mV = millivolts
µS/cm = microSiemens per centimeter
deg C = degrees Celcius
NTU = Nephelometric Turbidity Units
mg/L = milligram per liter
µg/L = microgram per liter
(--) = pH meter malfunction

R = Rejected. Orthophosphate results R flagged due to hold time exceedance.

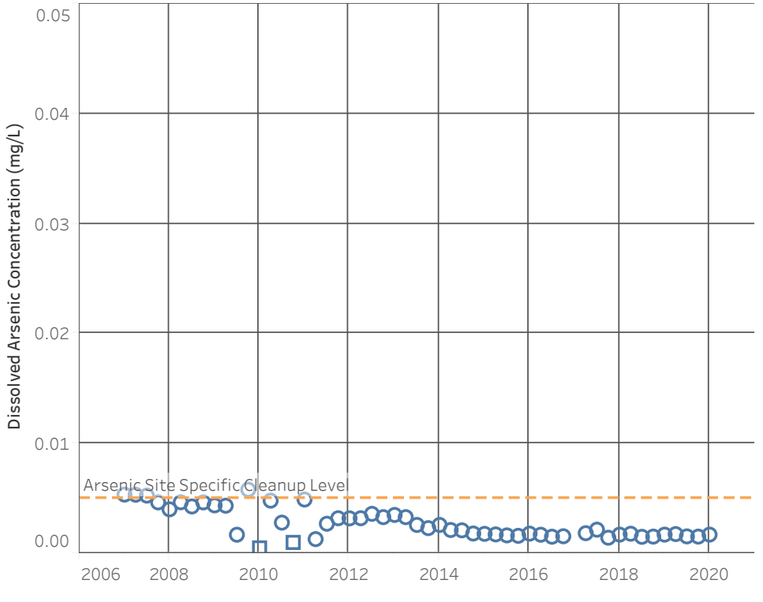
ATTACHMENT C

Groundwater Statistics and Time-Series Plots

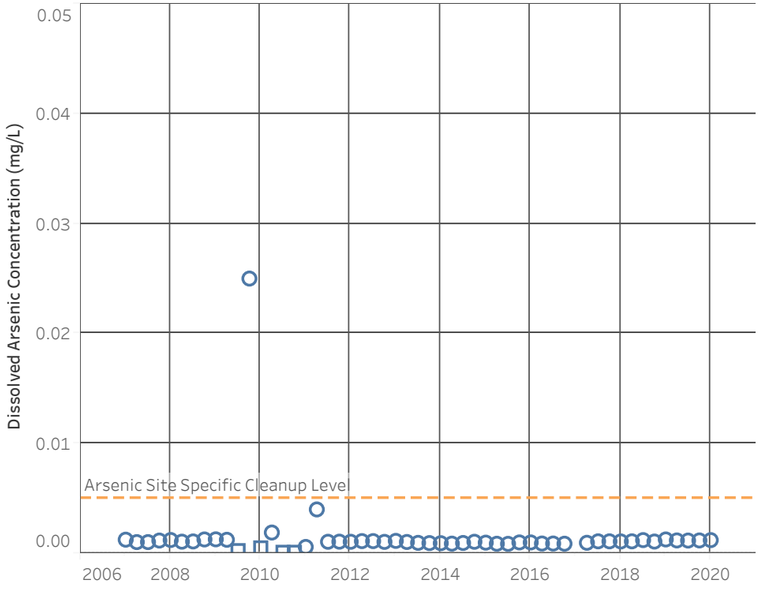
MW-5 (Background Well)



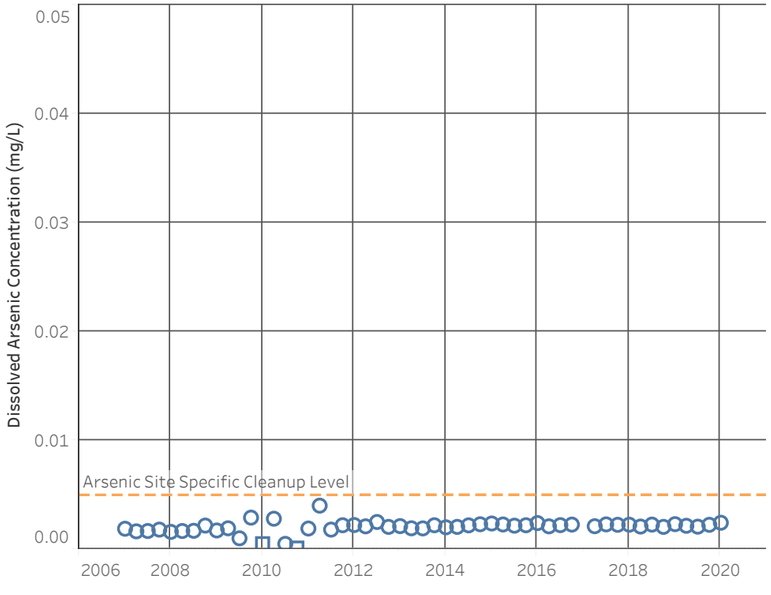
MW-6



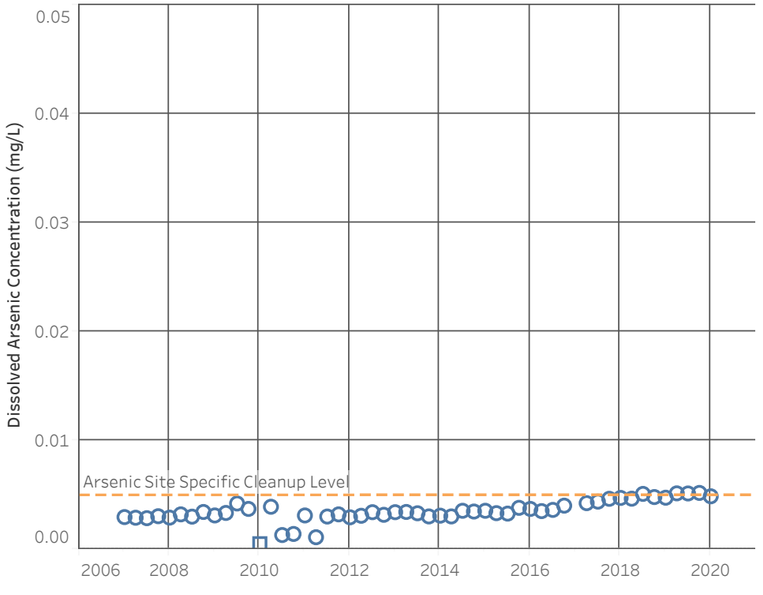
MW-7



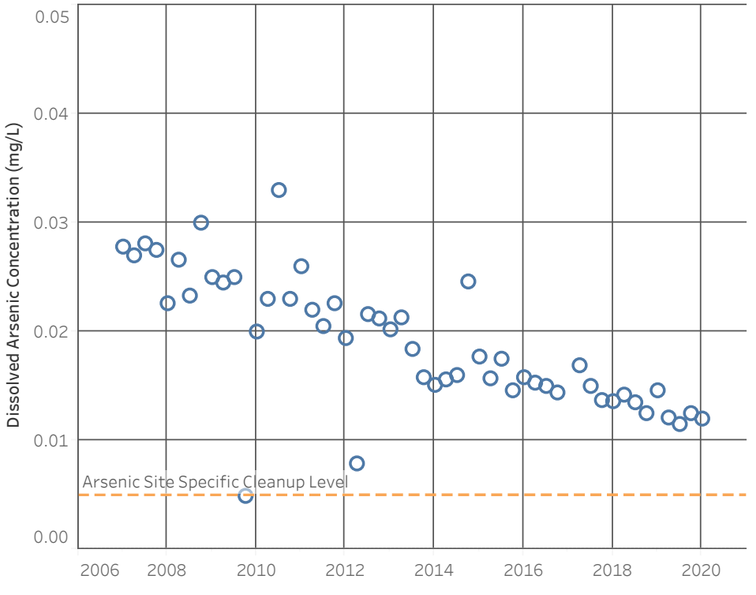
MW-12I



MW-13D



MW-14



Note: Non-detected values are shown at 1/2 the reporting limit.
Results from First Quarter 2017 were rejected. See text.

Result Flags
○ Detected □ U - Non-Detect

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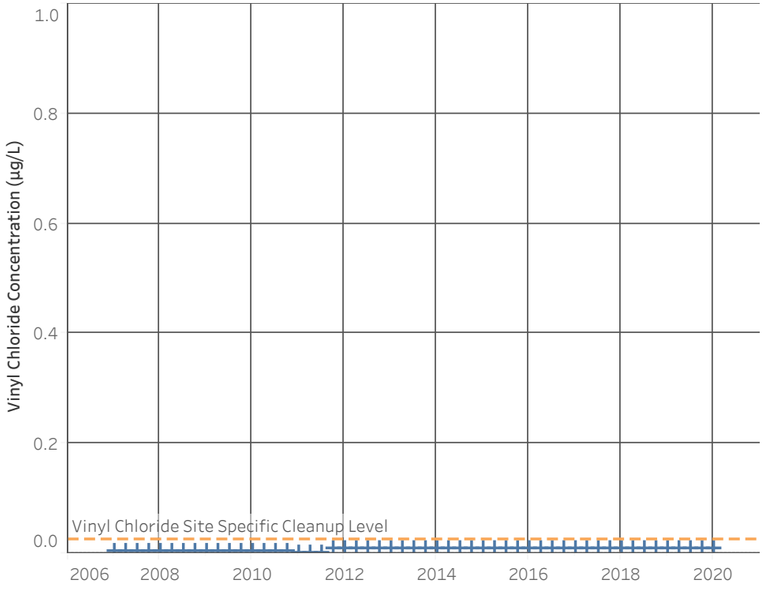
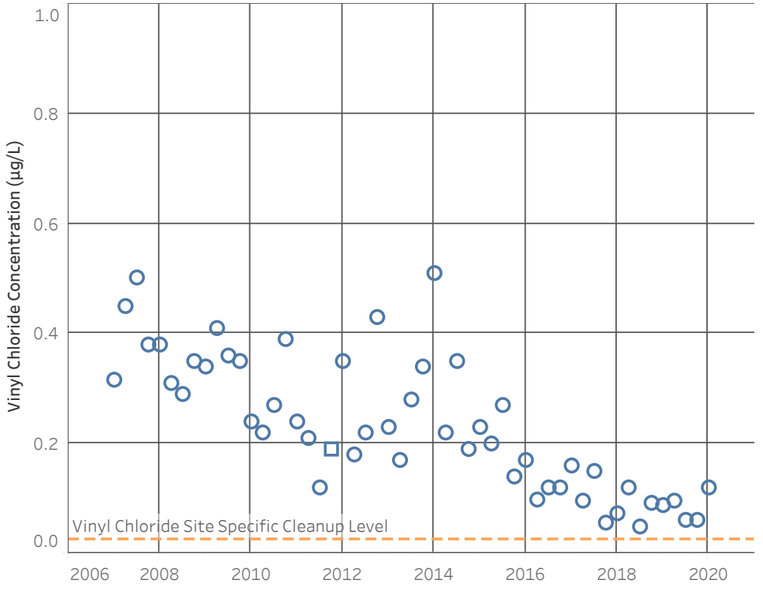
4/22/2020
Trend Plots (As)

Figure C-1 - Dissolved Arsenic Sampling Results
2020 First Quarter Monitoring Report
Hansville Landfill
Kitsap County, WA

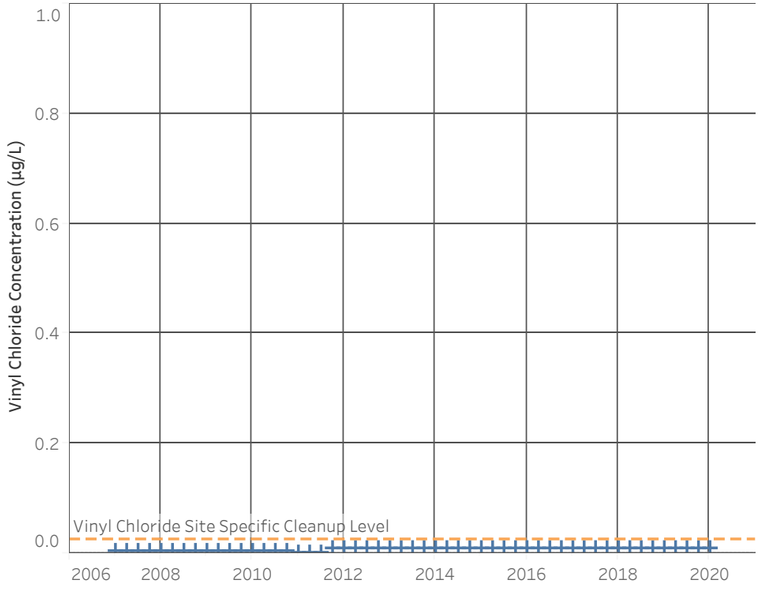
MW-5 (Background Well)



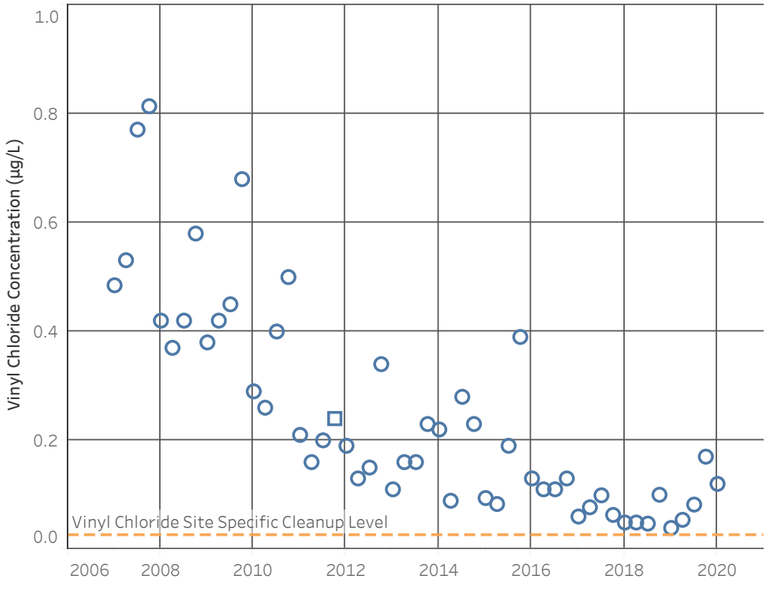
MW-6



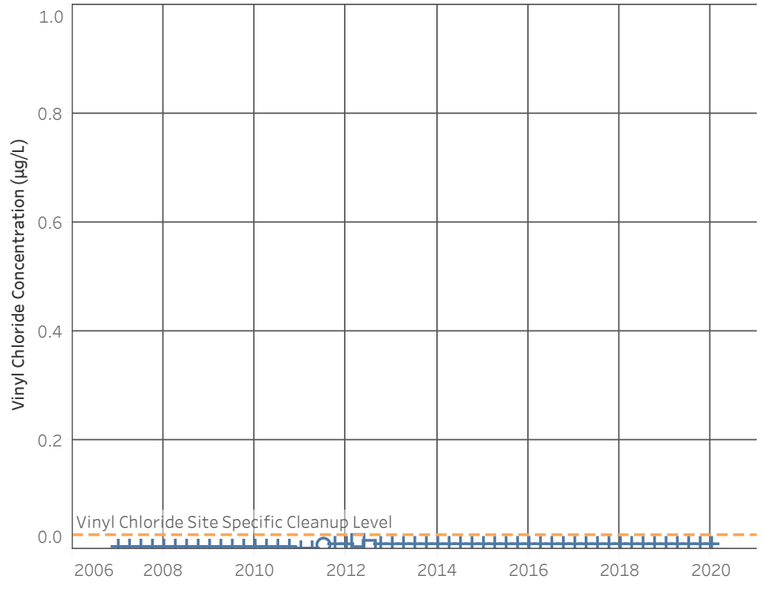
MW-7



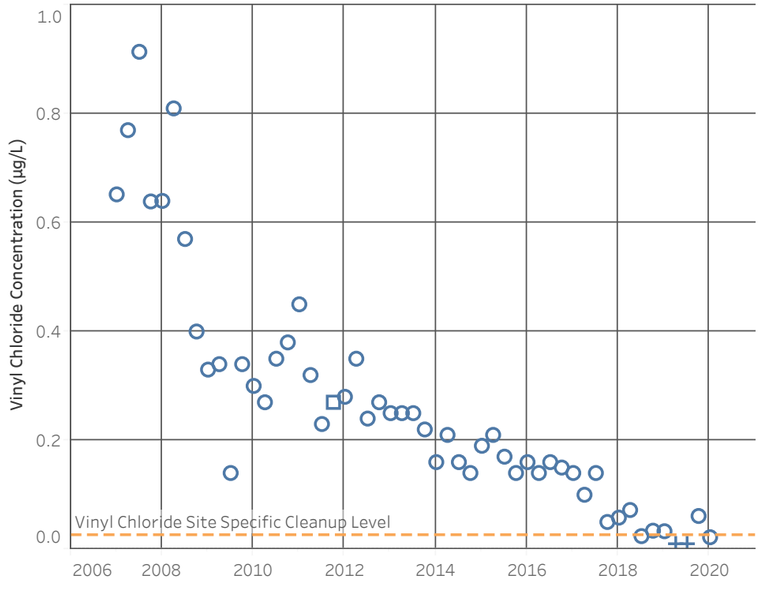
MW-12I



MW-13D



MW-14



Result Flags
Detected
J - Estimate
U - Non-Detect

Note: Non-detected values are shown at 1/2 the reporting limit.

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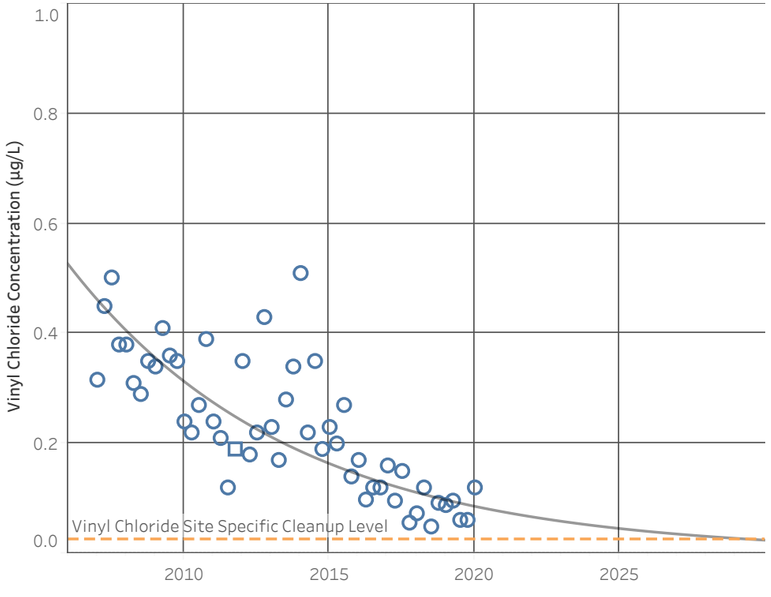
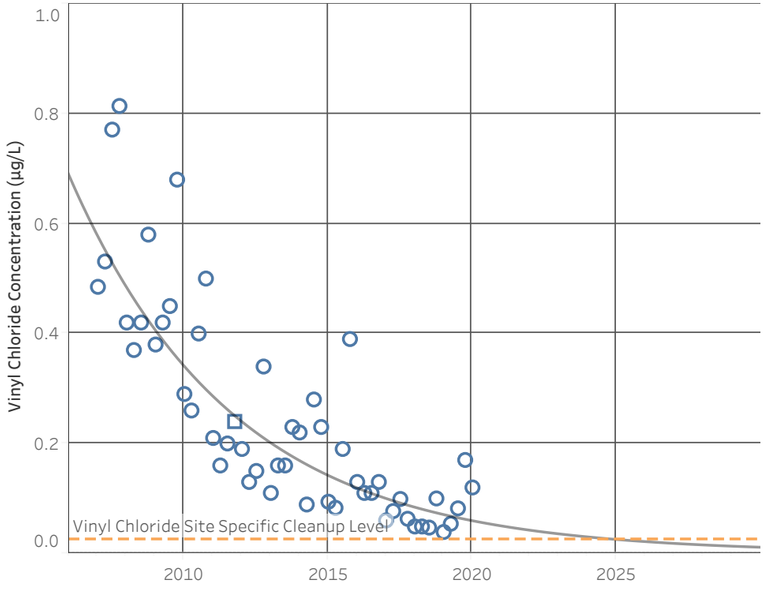
4/22/2020
Trend Plots (VC)

Figure C-2 - Vinyl Chloride Sampling Results
2020 First Quarter Environmental Monitoring Report
Hansville Landfill
Kitsap County, WA

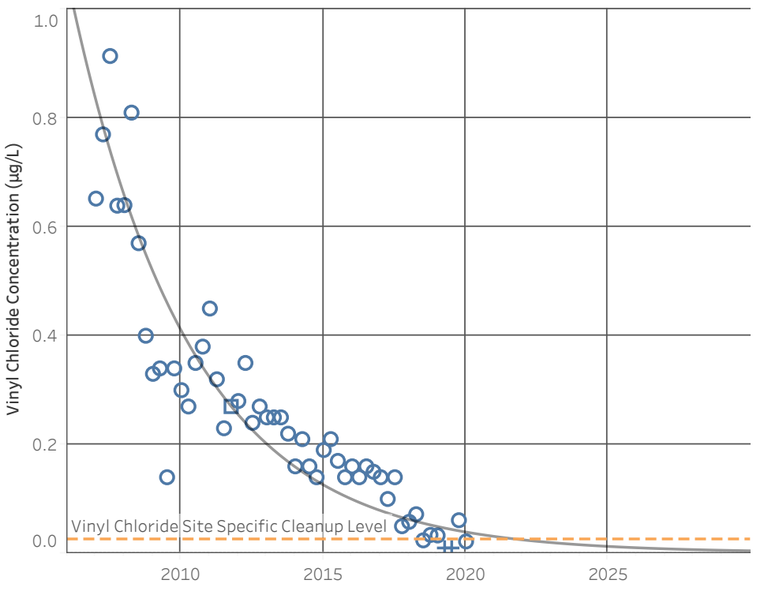
MW-6 Vinyl Chloride Trend



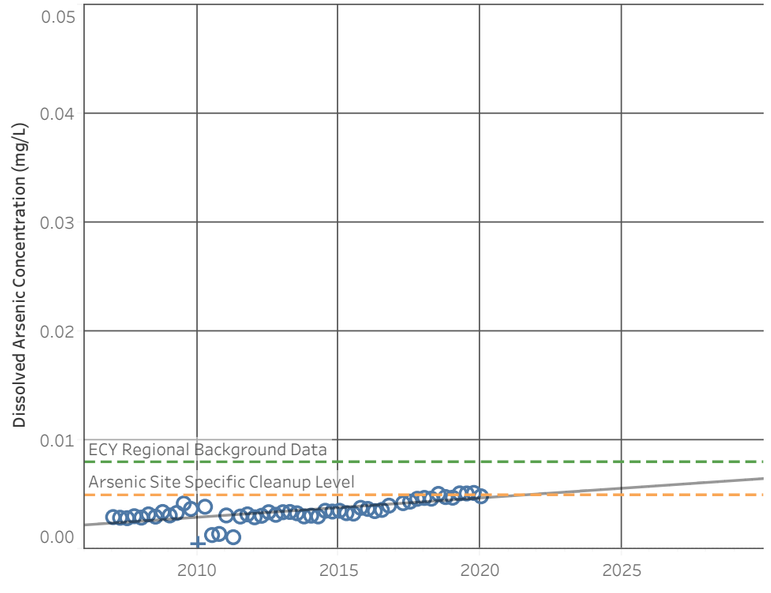
MW-12I Vinyl Chloride Trend



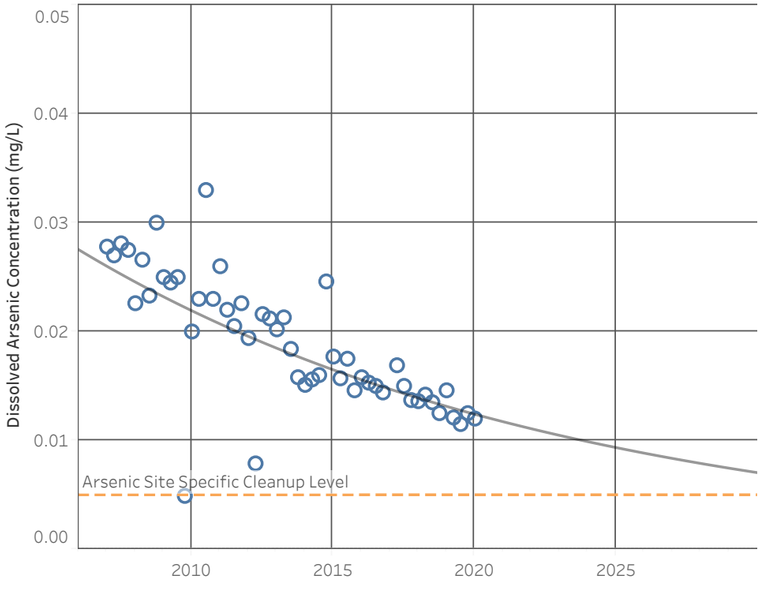
MW-14 Vinyl Chloride Trend



MW-13D Dissolved Arsenic Trend



MW-14 Dissolved Arsenic Trend



Note: Non-detected values are shown at 1/2 the reporting limit.
Attentuation curves based on exponential least squares fit to the data.

Result Flags
○ Detected □ J - Estimate + U - Non-Detect

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4/22/2020
Trend Plots (VC)

Figure C-3 - 10 Year Attenuation Curves
2020 1st Quarter Environmental Monitoring Report
Hansville Landfill
Kitsap County, WA

Table C-1. Statistical Analysis

Project 160423, Hansville Landfill, Hansville, WA

Dissolved Arsenic Statistical Results

Well	Statistical Trend[1]	Mann-Kendall Test[2]				Sen's Slope	
		Test Value, Z	Critical Value	Number of data points, n	Statistical Significance	(ug/L per day)	(ug/L per year)
MW-5	--[3]	--	--	--	--	--	--
MW-6	--	--	--	--	--	--	--
MW-7	--	--	--	--	--		--
MW-12I	--	--	--	--	--	--	--
MW-13D	Increasing	6.6	1.960	52	Yes	4.6E-07	0.00017
MW-14	Decreasing	-7.3	-1.96	52	Yes	-3.3E-06	-0.0012

Vinyl Chloride Statistical Results

Well	Statistical Trend[1]	Mann-Kendall Test[2]				Sen's Slope	
		Test Value, Z	Critical Value	Number of data points, n	Statistical Significance	(ug/L per day)	(ug/L per year)
MW-5	--[3]	--	--	--	--		--
MW-6	Decreasing	-6.7	-1.96	53	Yes	-6.8E-05	-0.025
MW-7	--	--	--	--	--		--
MW-12I	Decreasing	-7.0	-1.96	53	Yes	-9.5E-05	-0.035
MW-13D	--	--	--	--	--		--
MW-14	Decreasing	-8.6	-1.96	53	Yes	-1.0E-04	-0.038

Notes

1 - The Statistical Trend indicates:

"Non-significant" if the magnitude of the Test Value is less than the Critical Value,

"Increasing" if the magnitude of the Test Value is greater than the Critical Value and the Sen's Slope is positive, or

"Decreasing" if the magnitude of the Test Value is greater than the Critical Value and the Sen's Slope is negative.

2 - Mann-Kendall tests were performed with alpha = 0.05 (95% confidence level).

For N>40, Mann-Kendall uses an approximation of a normal distribution, represented by Test Value Z.

3 - "--" Indicates statistical analysis not conducted.

ug/L - micrograms per liter

ATTACHMENT D

Field Forms and Laboratory Reports

Aspect CONSULTING

Sample number MW-5-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-5 Page: 1 of 1

Project Name: Hansville Landfill
Project Number: 160423
Date: 1/22/2020
Starting Water Level (ft TOC): 100.07
Sampled by: DWO
Casing Stickup (ft):
Measuring Point of Well: N TOC
Total Depth (ft TOC):
Screened Interval (ft. TOC)
Casing Diameter (inches):
Filter Pack Interval (ft. TOC)

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): Middle

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
1016	0	0.2	100.07							Start, clear
1026			100.07	10.2	155.9	6.48	6.33	75.4	0.92	
1031			100.07	10.0	154.9	6.34	6.82	73.2	1.30	
1036			100.07	10.1	161.6	7.98	6.99	73.5	0.74	
1041			100.07	10.1	162.4	8.06	7.05	73.4	0.54	
1046			100.07	10.0	160.0	8.53	7.08	73.2	0.55	sample

Total Gallons Purged: 1.5
Total Casing Volumes Removed:
Ending Water Level (ft TOC): 100.07
Ending Total Depth (ft TOC):

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
1045	40	VOA	6	N	HCl	clear	0.77	
↓	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
↓	250	Poly	1	Y	N	↓	↓	

METHODS

Parameters measured with (instrument model & serial number) YSI: red Turbidimeter: white WLI: Blue/white
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site

Observations/Comments:

Aspect CONSULTING

Sample number MW-6-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-6 Page: 1 of 1

Project Name: Hansville Landfill
Date: 1/22/2020
Sampled by: DWD
Measuring Point of Well: N TOC
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Project Number: 160423
Starting Water Level (ft TOC): 74.02
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches): 2"

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): mid screen

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
1558	0	0.2	74.04							Start, clear
1603			74.01	12.4	326.7	2.19	9.15	-158.6	3.03	
1608			74.01	12.4	321.4	1.08	9.14	-209.5	0.44	
1613	1.0		74.02	12.3	321.9	1.18	9.21	-208.2	0.64	changed YSI batteries
1618			74.02	12.3	322.0	1.07	9.52	-230.0	0.70	
1623			74.02	12.2	323.4	1.01	9.74	-242.1	0.48	
1626			74.02	12.2	322.4	0.94	9.67	-241.5	0.53	
1629			74.02	12.2	321.5	0.96	9.69	-244.0	0.55	sample

Total Gallons Purged: 2.0
Total Casing Volumes Removed:
Ending Water Level (ft TOC): 74.02
Ending Total Depth (ft TOC):

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance: Color	Appearance: Turbidity & Sediment	Remarks
1630	40	VOA	6	N	HCl	clear	0.44	
↓	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
	250	Poly	1	Y	N			

METHODS

Parameters measured with (instrument model & serial number) YSI: Orange Turbidimeter: White WLI: Yellow
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments:

Aspect CONSULTING

Sample number MW-7-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-7 Page: 1 of 1

Project Name: Hansville Landfill
Date: 1/22/2020
Sampled by: DV, DB
Measuring Point of Well: N TOC
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Project Number: 160423
Starting Water Level (ft TOC): 84.93
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches): 2 in.

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): mid-screen

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
0845	0	0.2	84.92							Start
0850			84.63	9.4	209.1	1.16	6.41	92.1	2.23	
0855			84.95	9.4	207.8	0.62	6.39	89.8	2.56	
0900			84.91	9.4	209.3	0.49	6.38	85.4	2.36	
0905			84.92	9.3	212.3	0.68	6.40	82.6	3.00	
0910			84.90	9.3	215.0	0.71	6.41	79.4	2.06	Sample

Total Gallons Purged: 1.75
Total Casing Volumes Removed: —
Ending Water Level (ft TOC): 84.90
Ending Total Depth (ft TOC): —

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
0915	40	VOA	6	N	HCl	Clear	Slight	
	500	Amber	1	N	H2SO4			
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
	250	Poly	1	Y	N			

METHODS

Parameters measured with (instrument model & serial number) YSI: red Turbidimeter: white WLI: Blue/white
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments:

Aspect CONSULTING

Sample number MW-12I-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-12I Page: 1 of 1

Project Name: Hansville Landfill
Project Number: 160423
Date: 1/22/2020
Starting Water Level (ft TOC): 9.88
Sampled by: DB
Casing Stickup (ft):
Measuring Point of Well: N TOC
Total Depth (ft TOC):
Screened Interval (ft. TOC)
Casing Diameter (inches): 2
Filter Pack Interval (ft. TOC)

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): mid-screen

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
1145		0.4	9.78							Start
1150			9.77	9.3	142.1	0.75	6.07	67.8	1.37	
1155			9.79	9.3	143.8	0.33	6.53	67.8	0.63	
1200			9.79	9.3	143.1	0.28	6.66	69.0	0.31	
1205			9.81	9.3	143.3	0.29	6.70	69.0	0.30	
1210			9.81	9.3	143.8	0.31	6.78	68.9	0.27	sample

Total Gallons Purged: 3.5
Total Casing Volumes Removed: —
Ending Water Level (ft TOC): 9.79
Ending Total Depth (ft TOC): —

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance: Color	Appearance: Turbidity & Sediment	Remarks
1215	40	VOA	6	N	HCl	clear	.19	
↓	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
↓	250	Poly	1	Y	N			

METHODS

Parameters measured with (instrument model & serial number) YSI: red Turbidimeter: orange WLI: blue/white
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments:

Aspect CONSULTING

Sample number MW-13D-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-13D Page: 1 of 1

Project Name: Hansville Landfill
Project Number: 160423
Date: 1/22/2020
Sampled by: DB
Measuring Point of Well: N TOC
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)
Starting Water Level (ft TOC): 11.05
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches): 2

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): mid-screen

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
1310		0.2	11.16	—	—	—	—	—	—	Start
1315			11.26	9.9	181.1	0.63	8.05	92.2	2.45	
1320			11.26	9.8	181.7	0.46	7.30	83.3	2.33	
1325			11.22	9.7	182.1	0.47	7.19	82.4	1.98	
1330			11.18	9.4	181.9	0.44	7.25	82.8	1.75	
1335			11.17	9.5	181.7	0.40	7.22	83.2	1.81	sample

Total Gallons Purged: 1.75
Total Casing Volumes Removed: —
Ending Water Level (ft TOC): 11.09
Ending Total Depth (ft TOC): —

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
1340	40	VOA	6	N	HCl	clear	1.22	
	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
	250	Poly	1	Y	N			

METHODS

Parameters measured with (instrument model & serial number) YSI: red Turbidimeter: orange WLI: blue/white
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments:

Aspect CONSULTING

Sample number: MW-14-012220 / MW-2020-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-14 Page: 1 of 1

Project Name: Hansville Landfill
Date: 1/22/2020
Sampled by: DB
Measuring Point of Well: N TOC
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Project Number: 160423
Starting Water Level (ft TOC): 81.17
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches): 2

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): mid-screen

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
1610		0.3	81.21							Start
1615			81.17	10.8	181.4	0.69	6.44	66.4	2.28	
1620			81.22	10.8	177.0	0.31	6.60	67.4	1.13	
1625			81.22	10.8	176.6	0.26	6.63	68.0	0.72	
1630			81.19	10.8	176.9	0.25	6.62	68.4	0.68	
1635			81.21	10.8	175.3	0.31	6.70	68.4	0.50	sample

Total Gallons Purged: 2.25
Total Casing Volumes Removed: —
Ending Water Level (ft TOC): 81.19
Ending Total Depth (ft TOC): —

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance: Color	Appearance: Turbidity & Sediment	Remarks
1640	40	VOA	6	N	HCl	clear	0.63	
↓	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
↓	250	Poly	1	Y	N			

METHODS

Parameters measured with (instrument model & serial number) YSI: red Turbidimeter: orange WLI: blue/white
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments:

Aspect CONSULTING

Sample number SW-1-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SW-1 Page: 1 of 1

Project Name: Hansville Landfill
Project Number: 160423
Date: 1/22/2020
Starting Water Level (ft TOC): —
Sampled by: DWJ
Casing Stickup (ft): —
Measuring Point of Well: N TOC
Total Depth (ft TOC): —
Screened Interval (ft. TOC)
Casing Diameter (inches): —
Filter Pack Interval (ft. TOC)

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf
Sample Intake Depth (ft TOC): —

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
				8.5	161.9	10.36	8.87	-23.4	265	Start

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

Ending Water Level (ft TOC): _____ Ending Total Depth (ft TOC): _____

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
1155	40	VOA	6	N	HCl	slight yellow	2.65	
↓	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
↓	250	Poly	1	Y	N	↓	↓	

METHODS

Parameters measured with (instrument model & serial number) YSI: Orange Turbidimeter: White WLI: ✓
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments: pH meter on YSI malfunctioning, readings not accurate.

Aspect CONSULTING

Sample number SW-4-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SW-4 Page: 1 of ___

Project Name: Hansville Landfill
Project Number: 160423
Date: 1/22/2020
Sampled by: DWD
Measuring Point of Well: N TOC
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC):
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches):

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC):

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
				7.3	229.2	10.77	9.21	-57.8	27.9	Start

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

Ending Water Level (ft TOC): _____ Ending Total Depth (ft TOC): _____

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
1305	40	VOA	6	N	HCl	Hazy	27.9	
↓	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
↓	250	Poly	1	Y	N	↓	↓	

METHODS

Parameters measured with (instrument model & serial number) YSI: Pro Turbidimeter: WLI:
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments: pH sonde reading high

Aspect CONSULTING

Sample number SW-6-012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SW-1 Page: 1 of 1

Project Name: Hansville Landfill
Date: 1/22/2020
Sampled by: DWO
Measuring Point of Well: N TOC
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Project Number: 160423
Starting Water Level (ft TOC): /
Casing Stickup (ft): ~
Total Depth (ft TOC): /
Casing Diameter (inches): /

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): /

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
				6.7	87.3	10.94	8.93	-61.4	20.4	Start

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

Ending Water Level (ft TOC): _____ Ending Total Depth (ft TOC): _____

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
1340	40	VOA		N	HCl	Lt. Brn	20.4	
	500	Amber	1	N	H2SO4			
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
	250	Poly	1	Y	N			

METHODS

Parameters measured with (instrument model & serial number) YSI: Orange Turbidimeter: white WLI:
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site
Observations/Comments: PH sensor malfunctioning.

Aspect CONSULTING

Sample number SW-7 - 012220

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SW-7 Page: 1 of 1

Project Name: Hansville Landfill
Project Number: 160423
Date: 1/22/2020
Sampled by: DW/DB
Measuring Point of Well: N-TOC
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC): /
Casing Stickup (ft): /
Total Depth (ft TOC): /
Casing Diameter (inches): /

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 3/4"= 0.02 gpf 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
3/4"= 0.09 Lpf 2" = 0.62 Lpf 4" = 2.46 Lpf 6" = 5.56 Lpf

Sample Intake Depth (ft TOC): /

PURGING MEASUREMENTS

Criteria:		Typical 0.1-0.5 Lpm	Stable	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	pH	ORP (mv)	Turbidity (NTU)	Comments
				7.1	126.9	11.54	5.60	67.2	5.24	Start

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

Ending Water Level (ft TOC): _____ Ending Total Depth (ft TOC): _____

SAMPLE INVENTORY

Time	Volume mL	Bottle Type	Quantity	Filtration	Preservation	Appearance		Remarks
						Color	Turbidity & Sediment	
1500	40	VOA	6	N	HCl	Lt. Yn	5.24	
↓	500	Amber	1	N	H2SO4	↓	↓	
	500	Poly	2	N	N			
	500	Poly	2	Y	HNO3			
↓	250	Poly	1	Y	N	↓		

METHODS

Parameters measured with (instrument model & serial number) YSI: Red Turbidimeter: Hnt WLI:
Purging Equipment: dedicated bladder pump OR peristaltic Decon Equipment: Alconox + water
Disposal of Discharged Water: on site

Observations/Comments:

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-133169-1
Client Project/Site: Hansville Landfill
Sampling Event: 1Q Sampling

For:
Aspect Consulting
350 Madison Ave N
Bainbridge Island, Washington 98110

Attn: Ms. Meilani Lanier-Kamaha'o

Betsy Sara

Authorized for release by:
2/20/2020 3:25:34 PM

Betsy Sara, Project Manager II
(303)736-0189
betsy.sara@testamericainc.com

Table of Contents

Glossary

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

Job ID: 280-133169-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Aspect Consulting

Project: Hansville Landfill

Report Number: 280-133169-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This report may include reporting limits (RLs) less than Eurofins TestAmerica's standard reporting limit. The reported sample results and associated reporting limits are being used specifically to meet the needs of this project. Note that data are not normally reported to these levels without qualification because they are inherently less reliable and potentially less defensible than required by the latest industry standards.

Sample Receiving

The samples were received on 01/24/2020; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 0.2º C, 1.1º C and 1.7º C.

Holding Times

All holding times were within established control limits.

Method Blanks

All Method Blanks were within established control limits.

Laboratory Control Samples (LCS)

All Laboratory Control Samples were within established control limits.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD)

All MS and MSD samples were within established control limits.

General Comments

The analysis for 8260C SIM was performed by TestAmerica Buffalo. Their address and phone number are:
TestAmerica Buffalo
10 Hazelwood Drive, Suite 106
Amherst, NY 14228
716-691-2600

The analysis for Nitrate, Nitrite, Ortho-phosphate Method 300.0, and Dissolved Arsenic Method 200.8 were performed by ARI. Their address and phone number are:
Analytical Resources, Inc.
4611 S.134th Place
Tukwila, WA 98168-3240
206-695-6200

Detection Summary

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Client Sample ID: MW7-012220 — Lab Sample ID: 280-133169-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	120		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	120		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	1.7		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW5-012220 — Lab Sample ID: 280-133169-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	6.8		5.0		mg/L	1		300.0	Total/NA
Total Alkalinity	69		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	69		10		mg/L	1		SM 2320B	Total/NA

Client Sample ID: SW1-012220 — Lab Sample ID: 280-133169-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.8		3.0		mg/L	1		300.0	Total/NA
Sulfate	7.8		5.0		mg/L	1		300.0	Total/NA
Total Alkalinity	70		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	70		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	3.6		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW12I-012220 — Lab Sample ID: 280-133169-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.12		0.020		ug/L	1		8260C SIM	Total/NA
Manganese	30		1.0		ug/L	1		6020	Dissolved
Total Alkalinity	74		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	74		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	2.2		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: SW4-012220 — Lab Sample ID: 280-133169-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	36		1.0		ug/L	1		6020	Dissolved
Chloride	7.7		3.0		mg/L	1		300.0	Total/NA
Sulfate	10		5.0		mg/L	1		300.0	Total/NA
Total Alkalinity	110		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	110		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	15		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: SW6-012220 — Lab Sample ID: 280-133169-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	35		1.0		ug/L	1		6020	Dissolved
Chloride	3.3		3.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.037		0.030		mg/L	1		350.1	Total/NA
Total Alkalinity	31		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	31		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	27		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW13D-012220 — Lab Sample ID: 280-133169-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	5.6		1.0		ug/L	1		6020	Dissolved
Chloride	4.3		3.0		mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW13D-012220 (Continued) — Lab Sample ID: 280-133169-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	13		5.0		mg/L	1		300.0	Total/NA
Total Alkalinity	75		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	75		10		mg/L	1		SM 2320B	Total/NA

Client Sample ID: SW7-012220 — Lab Sample ID: 280-133169-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	3.6		1.0		ug/L	1		6020	Dissolved
Chloride	3.3		3.0		mg/L	1		300.0	Total/NA
Sulfate	6.0		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.039		0.030		mg/L	1		350.1	Total/NA
Total Alkalinity	37		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	37		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	14		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW6-012220 — Lab Sample ID: 280-133169-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.12		0.020		ug/L	1		8260C SIM	Total/NA
Manganese	420		1.0		ug/L	1		6020	Dissolved
Chloride	3.6		3.0		mg/L	1		300.0	Total/NA
Sulfate	21		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.030		0.030		mg/L	1		350.1	Total/NA
Total Alkalinity	170		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	170		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	1.2		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW14-012220 — Lab Sample ID: 280-133169-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.022		0.020		ug/L	1		8260C SIM	Total/NA
1,2-Dichloroethene, Total	2.0		2.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.0		1.0		ug/L	1		8260C	Total/NA
Manganese	1500		1.0		ug/L	1		6020	Dissolved
Sulfate	7.3		5.0		mg/L	1		300.0	Total/NA
Total Alkalinity	86		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	86		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		SM 5310B	Total/NA

Client Sample ID: MW20DD-012220 — Lab Sample ID: 280-133169-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.022		0.020		ug/L	1		8260C SIM	Total/NA
1,2-Dichloroethene, Total	2.0		2.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.0		1.0		ug/L	1		8260C	Total/NA
Manganese	1500		1.0		ug/L	1		6020	Dissolved
Sulfate	7.2		5.0		mg/L	1		300.0	Total/NA
Ammonia as N	0.043		0.030		mg/L	1		350.1	Total/NA
Total Alkalinity	86		10		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity	86		10		mg/L	1		SM 2320B	Total/NA
Total Organic Carbon - Average	1.6		1.0		mg/L	1		SM 5310B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Client Sample ID: TB1

Lab Sample ID: 280-133169-12

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
6020	Metals (ICP/MS)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 5310B	Organic Carbon, Total (TOC)	SM	TAL DEN
Subcontract	Dissolved As (ARI) - direct sub to ARI from field	None	SC0056
Subcontract	Nitrate/Nitrite/o-phos(field filtered) (ARI) - direct sub to ARI from field	None	SC0056
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL DEN
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200
TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-133169-1	MW7-012220	Water	01/22/20 08:45	01/24/20 09:20	
280-133169-2	MW5-012220	Water	01/22/20 10:45	01/24/20 09:20	
280-133169-3	SW1-012220	Water	01/22/20 11:55	01/24/20 09:20	
280-133169-4	MW12I-012220	Water	01/22/20 12:15	01/24/20 09:20	
280-133169-5	SW4-012220	Water	01/22/20 13:05	01/24/20 09:20	
280-133169-6	SW6-012220	Water	01/22/20 13:40	01/24/20 09:20	
280-133169-7	MW13D-012220	Water	01/22/20 13:40	01/24/20 09:20	
280-133169-8	SW7-012220	Water	01/22/20 15:00	01/24/20 09:20	
280-133169-9	MW6-012220	Water	01/22/20 16:30	01/24/20 09:20	
280-133169-10	MW14-012220	Water	01/22/20 16:40	01/24/20 09:20	
280-133169-11	MW20DD-012220	Water	01/22/20 00:00	01/24/20 09:20	
280-133169-12	TB1	Water	01/22/20 16:40	01/24/20 09:20	

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Client Sample ID: MW7-012220
Date Collected: 01/22/20 08:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/30/20 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*136*		*50 - 150*		*01/30/20 22:46*	*1*
TBA-d9 (Surr)	*127*		*50 - 150*		*01/30/20 22:46*	*1*

Client Sample ID: MW5-012220
Date Collected: 01/22/20 10:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/30/20 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*134*		*50 - 150*		*01/30/20 23:10*	*1*
TBA-d9 (Surr)	*126*		*50 - 150*		*01/30/20 23:10*	*1*

Client Sample ID: SW1-012220
Date Collected: 01/22/20 11:55
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/30/20 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*139*		*50 - 150*		*01/30/20 23:36*	*1*
TBA-d9 (Surr)	*134*		*50 - 150*		*01/30/20 23:36*	*1*

Client Sample ID: MW12I-012220
Date Collected: 01/22/20 12:15
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.12**		0.020		ug/L			01/31/20 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*134*		*50 - 150*		*01/31/20 00:00*	*1*
TBA-d9 (Surr)	*127*		*50 - 150*		*01/31/20 00:00*	*1*

Client Sample ID: SW4-012220
Date Collected: 01/22/20 13:05
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/31/20 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*137*		*50 - 150*		*01/31/20 00:25*	*1*
TBA-d9 (Surr)	*126*		*50 - 150*		*01/31/20 00:25*	*1*

Client Sample ID: SW6-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/31/20 00:49	1

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	137		50 - 150		01/31/20 00:49	1
TBA-d9 (Surr)	121		50 - 150		01/31/20 00:49	1

Client Sample ID: MW13D-012220 — **Lab Sample ID: 280-133169-7**
Date Collected: 01/22/20 13:40 — **Matrix: Water**
Date Received: 01/24/20 09:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/31/20 01:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	142		50 - 150		01/31/20 01:13	1
TBA-d9 (Surr)	132		50 - 150		01/31/20 01:13	1

Client Sample ID: SW7-012220 — **Lab Sample ID: 280-133169-8**
Date Collected: 01/22/20 15:00 — **Matrix: Water**
Date Received: 01/24/20 09:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/31/20 01:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	137		50 - 150		01/31/20 01:38	1
TBA-d9 (Surr)	126		50 - 150		01/31/20 01:38	1

Client Sample ID: MW6-012220 — **Lab Sample ID: 280-133169-9**
Date Collected: 01/22/20 16:30 — **Matrix: Water**
Date Received: 01/24/20 09:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.12**		0.020		ug/L			01/31/20 02:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	137		50 - 150		01/31/20 02:02	1
TBA-d9 (Surr)	137		50 - 150		01/31/20 02:02	1

Client Sample ID: MW14-012220 — **Lab Sample ID: 280-133169-10**
Date Collected: 01/22/20 16:40 — **Matrix: Water**
Date Received: 01/24/20 09:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.022**		0.020		ug/L			01/31/20 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	134		50 - 150		01/31/20 02:26	1
TBA-d9 (Surr)	121		50 - 150		01/31/20 02:26	1

Client Sample ID: MW20DD-012220 — **Lab Sample ID: 280-133169-11**
Date Collected: 01/22/20 00:00 — **Matrix: Water**
Date Received: 01/24/20 09:20

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	**0.022**		0.020		ug/L			01/31/20 02:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	134		50 - 150		01/31/20 02:51	1
TBA-d9 (Surr)	128		50 - 150		01/31/20 02:51	1

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB1
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/31/20 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*137*		*50 - 150*		*01/31/20 03:16*	*1*
TBA-d9 (Surr)	*131*		*50 - 150*		*01/31/20 03:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: MW7-012220
Date Collected: 01/22/20 08:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/28/20 23:53	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/28/20 23:53	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/28/20 23:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/28/20 23:53	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/28/20 23:53	1
1,1-Dichloroethane	ND		1.0		ug/L			01/28/20 23:53	1
1,1-Dichloroethene	ND		1.0		ug/L			01/28/20 23:53	1
1,1-Dichloropropene	ND		1.0		ug/L			01/28/20 23:53	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/28/20 23:53	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/28/20 23:53	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/28/20 23:53	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,2-Dichloroethane	ND		1.0		ug/L			01/28/20 23:53	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/28/20 23:53	1
1,2-Dichloropropane	ND		1.0		ug/L			01/28/20 23:53	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,3-Dichloropropane	ND		1.0		ug/L			01/28/20 23:53	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/28/20 23:53	1
1,4-Dioxane	ND		40		ug/L			01/28/20 23:53	1
2,2-Dichloropropane	ND		1.0		ug/L			01/28/20 23:53	1
2-Butanone (MEK)	ND		10		ug/L			01/28/20 23:53	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/28/20 23:53	1
2-Hexanone	ND		5.0		ug/L			01/28/20 23:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/28/20 23:53	1
Acetone	ND		10		ug/L			01/28/20 23:53	1
Acetonitrile	ND		15		ug/L			01/28/20 23:53	1
Acrolein	ND		20		ug/L			01/28/20 23:53	1
Acrylonitrile	ND		5.0		ug/L			01/28/20 23:53	1
Benzene	ND		1.0		ug/L			01/28/20 23:53	1
Bromobenzene	ND		1.0		ug/L			01/28/20 23:53	1
Bromochloromethane	ND		1.0		ug/L			01/28/20 23:53	1
Bromodichloromethane	ND		1.0		ug/L			01/28/20 23:53	1
Bromoform	ND		1.0		ug/L			01/28/20 23:53	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW7-012220
Date Collected: 01/22/20 08:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0		ug/L			01/28/20 23:53	1
Butyl alcohol, n-	ND		40		ug/L			01/28/20 23:53	1
Butyl alcohol, tert-	ND		10		ug/L			01/28/20 23:53	1
Carbon disulfide	ND		1.0		ug/L			01/28/20 23:53	1
Carbon tetrachloride	ND		1.0		ug/L			01/28/20 23:53	1
Chlorobenzene	ND		1.0		ug/L			01/28/20 23:53	1
Chlorodifluoromethane	ND		1.0		ug/L			01/28/20 23:53	1
Chloroethane	ND		1.0		ug/L			01/28/20 23:53	1
Chloroform	ND		1.0		ug/L			01/28/20 23:53	1
Chloromethane	ND		1.0		ug/L			01/28/20 23:53	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/28/20 23:53	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/28/20 23:53	1
Cyclohexane	ND		1.0		ug/L			01/28/20 23:53	1
Dibromochloromethane	ND		1.0		ug/L			01/28/20 23:53	1
Dibromomethane	ND		1.0		ug/L			01/28/20 23:53	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/28/20 23:53	1
Dichlorofluoromethane	ND		1.0		ug/L			01/28/20 23:53	1
Ethyl acetate	ND		1.0		ug/L			01/28/20 23:53	1
Ethyl ether	ND		1.0		ug/L			01/28/20 23:53	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/28/20 23:53	1
Ethylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
Hexachlorobutadiene	ND		2.0		ug/L			01/28/20 23:53	1
Hexane	ND		10		ug/L			01/28/20 23:53	1
Iodomethane	ND		1.0		ug/L			01/28/20 23:53	1
Isobutanol	ND		25		ug/L			01/28/20 23:53	1
Isopropyl ether	ND		1.0		ug/L			01/28/20 23:53	1
Isopropylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
Methacrylonitrile	ND		5.0		ug/L			01/28/20 23:53	1
Methyl acetate	ND		2.5		ug/L			01/28/20 23:53	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/28/20 23:53	1
Methylcyclohexane	ND		1.0		ug/L			01/28/20 23:53	1
Methylene Chloride	ND		1.0		ug/L			01/28/20 23:53	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/28/20 23:53	1
Naphthalene	ND		1.0		ug/L			01/28/20 23:53	1
n-Butylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
N-Propylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
o-Chlorotoluene	ND		1.0		ug/L			01/28/20 23:53	1
o-Xylene	ND		1.0		ug/L			01/28/20 23:53	1
p-Chlorotoluene	ND		1.0		ug/L			01/28/20 23:53	1
p-Cymene	ND		1.0		ug/L			01/28/20 23:53	1
sec-Butylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
Styrene	ND		1.0		ug/L			01/28/20 23:53	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/28/20 23:53	1
tert-Butylbenzene	ND		1.0		ug/L			01/28/20 23:53	1
Tetrachloroethene	ND		1.0		ug/L			01/28/20 23:53	1
Tetrahydrofuran	ND		5.0		ug/L			01/28/20 23:53	1
Toluene	ND		1.0		ug/L			01/28/20 23:53	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/28/20 23:53	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/28/20 23:53	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW7-012220
Date Collected: 01/22/20 08:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/28/20 23:53	1
Trichloroethene	ND		1.0		ug/L			01/28/20 23:53	1
Trichlorofluoromethane	ND		1.0		ug/L			01/28/20 23:53	1
Vinyl acetate	ND		5.0		ug/L			01/28/20 23:53	1
Vinyl chloride	ND		1.0		ug/L			01/28/20 23:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/28/20 23:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*01/28/20 23:53*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*01/28/20 23:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/28/20 23:53*	*1*

Client Sample ID: MW5-012220
Date Collected: 01/22/20 10:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 00:15	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 00:15	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 00:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 00:15	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 00:15	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 00:15	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 00:15	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 00:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 00:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 00:15	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 00:15	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 00:15	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 00:15	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 00:15	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 00:15	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 00:15	1
1,4-Dioxane	ND		40		ug/L			01/29/20 00:15	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 00:15	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 00:15	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 00:15	1
2-Hexanone	ND		5.0		ug/L			01/29/20 00:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 00:15	1
Acetone	ND		10		ug/L			01/29/20 00:15	1
Acetonitrile	ND		15		ug/L			01/29/20 00:15	1
Acrolein	ND		20		ug/L			01/29/20 00:15	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW5-012220
Date Collected: 01/22/20 10:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		5.0		ug/L			01/29/20 00:15	1
Benzene	ND		1.0		ug/L			01/29/20 00:15	1
Bromobenzene	ND		1.0		ug/L			01/29/20 00:15	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 00:15	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 00:15	1
Bromoform	ND		1.0		ug/L			01/29/20 00:15	1
Bromomethane	ND		1.0		ug/L			01/29/20 00:15	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 00:15	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 00:15	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 00:15	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 00:15	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 00:15	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 00:15	1
Chloroethane	ND		1.0		ug/L			01/29/20 00:15	1
Chloroform	ND		1.0		ug/L			01/29/20 00:15	1
Chloromethane	ND		1.0		ug/L			01/29/20 00:15	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 00:15	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 00:15	1
Cyclohexane	ND		1.0		ug/L			01/29/20 00:15	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 00:15	1
Dibromomethane	ND		1.0		ug/L			01/29/20 00:15	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 00:15	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 00:15	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 00:15	1
Ethyl ether	ND		1.0		ug/L			01/29/20 00:15	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 00:15	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 00:15	1
Hexane	ND		10		ug/L			01/29/20 00:15	1
Iodomethane	ND		1.0		ug/L			01/29/20 00:15	1
Isobutanol	ND		25		ug/L			01/29/20 00:15	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 00:15	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 00:15	1
Methyl acetate	ND		2.5		ug/L			01/29/20 00:15	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 00:15	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 00:15	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 00:15	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 00:15	1
Naphthalene	ND		1.0		ug/L			01/29/20 00:15	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 00:15	1
o-Xylene	ND		1.0		ug/L			01/29/20 00:15	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 00:15	1
p-Cymene	ND		1.0		ug/L			01/29/20 00:15	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
Styrene	ND		1.0		ug/L			01/29/20 00:15	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 00:15	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW5-012220
Date Collected: 01/22/20 10:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 00:15	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 00:15	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 00:15	1
Toluene	ND		1.0		ug/L			01/29/20 00:15	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 00:15	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 00:15	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 00:15	1
Trichloroethene	ND		1.0		ug/L			01/29/20 00:15	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 00:15	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 00:15	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 00:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 00:15*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*01/29/20 00:15*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*01/29/20 00:15*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/29/20 00:15*	*1*

Client Sample ID: SW1-012220
Date Collected: 01/22/20 11:55
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 00:39	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 00:39	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 00:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 00:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 00:39	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 00:39	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 00:39	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 00:39	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 00:39	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 00:39	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 00:39	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 00:39	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 00:39	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 00:39	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 00:39	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 00:39	1
1,4-Dioxane	ND		40		ug/L			01/29/20 00:39	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 00:39	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 00:39	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW1-012220
Date Collected: 01/22/20 11:55
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 00:39	1
2-Hexanone	ND		5.0		ug/L			01/29/20 00:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 00:39	1
Acetone	ND		10		ug/L			01/29/20 00:39	1
Acetonitrile	ND		15		ug/L			01/29/20 00:39	1
Acrolein	ND		20		ug/L			01/29/20 00:39	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 00:39	1
Benzene	ND		1.0		ug/L			01/29/20 00:39	1
Bromobenzene	ND		1.0		ug/L			01/29/20 00:39	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 00:39	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 00:39	1
Bromoform	ND		1.0		ug/L			01/29/20 00:39	1
Bromomethane	ND		1.0		ug/L			01/29/20 00:39	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 00:39	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 00:39	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 00:39	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 00:39	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 00:39	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 00:39	1
Chloroethane	ND		1.0		ug/L			01/29/20 00:39	1
Chloroform	ND		1.0		ug/L			01/29/20 00:39	1
Chloromethane	ND		1.0		ug/L			01/29/20 00:39	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 00:39	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 00:39	1
Cyclohexane	ND		1.0		ug/L			01/29/20 00:39	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 00:39	1
Dibromomethane	ND		1.0		ug/L			01/29/20 00:39	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 00:39	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 00:39	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 00:39	1
Ethyl ether	ND		1.0		ug/L			01/29/20 00:39	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 00:39	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 00:39	1
Hexane	ND		10		ug/L			01/29/20 00:39	1
Iodomethane	ND		1.0		ug/L			01/29/20 00:39	1
Isobutanol	ND		25		ug/L			01/29/20 00:39	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 00:39	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 00:39	1
Methyl acetate	ND		2.5		ug/L			01/29/20 00:39	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 00:39	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 00:39	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 00:39	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 00:39	1
Naphthalene	ND		1.0		ug/L			01/29/20 00:39	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 00:39	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW1-012220
Date Collected: 01/22/20 11:55
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			01/29/20 00:39	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 00:39	1
p-Cymene	ND		1.0		ug/L			01/29/20 00:39	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
Styrene	ND		1.0		ug/L			01/29/20 00:39	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 00:39	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 00:39	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 00:39	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 00:39	1
Toluene	ND		1.0		ug/L			01/29/20 00:39	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 00:39	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 00:39	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 00:39	1
Trichloroethene	ND		1.0		ug/L			01/29/20 00:39	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 00:39	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 00:39	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 00:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 00:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*01/29/20 00:39*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*01/29/20 00:39*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/29/20 00:39*	*1*

Client Sample ID: MW12I-012220
Date Collected: 01/22/20 12:15
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 01:02	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 01:02	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 01:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 01:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 01:02	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 01:02	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 01:02	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 01:02	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:02	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 01:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:02	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 01:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 01:02	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 01:02	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:02	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 01:02	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 01:02	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 01:02	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:02	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 01:02	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW12I-012220
Date Collected: 01/22/20 12:15
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:02	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 01:02	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:02	1
1,4-Dioxane	ND		40		ug/L			01/29/20 01:02	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 01:02	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 01:02	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 01:02	1
2-Hexanone	ND		5.0		ug/L			01/29/20 01:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 01:02	1
Acetone	ND		10		ug/L			01/29/20 01:02	1
Acetonitrile	ND		15		ug/L			01/29/20 01:02	1
Acrolein	ND		20		ug/L			01/29/20 01:02	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 01:02	1
Benzene	ND		1.0		ug/L			01/29/20 01:02	1
Bromobenzene	ND		1.0		ug/L			01/29/20 01:02	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 01:02	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 01:02	1
Bromoform	ND		1.0		ug/L			01/29/20 01:02	1
Bromomethane	ND		1.0		ug/L			01/29/20 01:02	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 01:02	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 01:02	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 01:02	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 01:02	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 01:02	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 01:02	1
Chloroethane	ND		1.0		ug/L			01/29/20 01:02	1
Chloroform	ND		1.0		ug/L			01/29/20 01:02	1
Chloromethane	ND		1.0		ug/L			01/29/20 01:02	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 01:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 01:02	1
Cyclohexane	ND		1.0		ug/L			01/29/20 01:02	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 01:02	1
Dibromomethane	ND		1.0		ug/L			01/29/20 01:02	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 01:02	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 01:02	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 01:02	1
Ethyl ether	ND		1.0		ug/L			01/29/20 01:02	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 01:02	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 01:02	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 01:02	1
Hexane	ND		10		ug/L			01/29/20 01:02	1
Iodomethane	ND		1.0		ug/L			01/29/20 01:02	1
Isobutanol	ND		25		ug/L			01/29/20 01:02	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 01:02	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 01:02	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 01:02	1
Methyl acetate	ND		2.5		ug/L			01/29/20 01:02	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 01:02	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 01:02	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW12I-012220
Date Collected: 01/22/20 12:15
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0		ug/L			01/29/20 01:02	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 01:02	1
Naphthalene	ND		1.0		ug/L			01/29/20 01:02	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 01:02	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 01:02	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 01:02	1
o-Xylene	ND		1.0		ug/L			01/29/20 01:02	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 01:02	1
p-Cymene	ND		1.0		ug/L			01/29/20 01:02	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 01:02	1
Styrene	ND		1.0		ug/L			01/29/20 01:02	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 01:02	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 01:02	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 01:02	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 01:02	1
Toluene	ND		1.0		ug/L			01/29/20 01:02	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 01:02	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 01:02	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 01:02	1
Trichloroethene	ND		1.0		ug/L			01/29/20 01:02	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 01:02	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 01:02	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 01:02	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 01:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*01/29/20 01:02*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*01/29/20 01:02*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/29/20 01:02*	*1*

Client Sample ID: SW4-012220
Date Collected: 01/22/20 13:05
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 01:25	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 01:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 01:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 01:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 01:25	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 01:25	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 01:25	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 01:25	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 01:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 01:25	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 01:25	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW4-012220
Date Collected: 01/22/20 13:05
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 01:25	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 01:25	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 01:25	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 01:25	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:25	1
1,4-Dioxane	ND		40		ug/L			01/29/20 01:25	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 01:25	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 01:25	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 01:25	1
2-Hexanone	ND		5.0		ug/L			01/29/20 01:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 01:25	1
Acetone	ND		10		ug/L			01/29/20 01:25	1
Acetonitrile	ND		15		ug/L			01/29/20 01:25	1
Acrolein	ND		20		ug/L			01/29/20 01:25	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 01:25	1
Benzene	ND		1.0		ug/L			01/29/20 01:25	1
Bromobenzene	ND		1.0		ug/L			01/29/20 01:25	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 01:25	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 01:25	1
Bromoform	ND		1.0		ug/L			01/29/20 01:25	1
Bromomethane	ND		1.0		ug/L			01/29/20 01:25	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 01:25	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 01:25	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 01:25	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 01:25	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 01:25	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 01:25	1
Chloroethane	ND		1.0		ug/L			01/29/20 01:25	1
Chloroform	ND		1.0		ug/L			01/29/20 01:25	1
Chloromethane	ND		1.0		ug/L			01/29/20 01:25	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 01:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 01:25	1
Cyclohexane	ND		1.0		ug/L			01/29/20 01:25	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 01:25	1
Dibromomethane	ND		1.0		ug/L			01/29/20 01:25	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 01:25	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 01:25	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 01:25	1
Ethyl ether	ND		1.0		ug/L			01/29/20 01:25	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 01:25	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 01:25	1
Hexane	ND		10		ug/L			01/29/20 01:25	1
Iodomethane	ND		1.0		ug/L			01/29/20 01:25	1
Isobutanol	ND		25		ug/L			01/29/20 01:25	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW4-012220
Date Collected: 01/22/20 13:05
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	ND		1.0		ug/L			01/29/20 01:25	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 01:25	1
Methyl acetate	ND		2.5		ug/L			01/29/20 01:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 01:25	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 01:25	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 01:25	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 01:25	1
Naphthalene	ND		1.0		ug/L			01/29/20 01:25	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 01:25	1
o-Xylene	ND		1.0		ug/L			01/29/20 01:25	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 01:25	1
p-Cymene	ND		1.0		ug/L			01/29/20 01:25	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
Styrene	ND		1.0		ug/L			01/29/20 01:25	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 01:25	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 01:25	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 01:25	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 01:25	1
Toluene	ND		1.0		ug/L			01/29/20 01:25	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 01:25	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 01:25	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 01:25	1
Trichloroethene	ND		1.0		ug/L			01/29/20 01:25	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 01:25	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 01:25	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 01:25	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 01:25*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*01/29/20 01:25*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*01/29/20 01:25*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/29/20 01:25*	*1*

Client Sample ID: SW6-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 01:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 01:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 01:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 01:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 01:48	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 01:48	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 01:48	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 01:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW6-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 01:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 01:48	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 01:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 01:48	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 01:48	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 01:48	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 01:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 01:48	1
1,4-Dioxane	ND		40		ug/L			01/29/20 01:48	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 01:48	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 01:48	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 01:48	1
2-Hexanone	ND		5.0		ug/L			01/29/20 01:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 01:48	1
Acetone	ND		10		ug/L			01/29/20 01:48	1
Acetonitrile	ND		15		ug/L			01/29/20 01:48	1
Acrolein	ND		20		ug/L			01/29/20 01:48	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 01:48	1
Benzene	ND		1.0		ug/L			01/29/20 01:48	1
Bromobenzene	ND		1.0		ug/L			01/29/20 01:48	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 01:48	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 01:48	1
Bromoform	ND		1.0		ug/L			01/29/20 01:48	1
Bromomethane	ND		1.0		ug/L			01/29/20 01:48	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 01:48	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 01:48	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 01:48	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 01:48	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 01:48	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 01:48	1
Chloroethane	ND		1.0		ug/L			01/29/20 01:48	1
Chloroform	ND		1.0		ug/L			01/29/20 01:48	1
Chloromethane	ND		1.0		ug/L			01/29/20 01:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 01:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 01:48	1
Cyclohexane	ND		1.0		ug/L			01/29/20 01:48	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 01:48	1
Dibromomethane	ND		1.0		ug/L			01/29/20 01:48	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 01:48	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 01:48	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 01:48	1
Ethyl ether	ND		1.0		ug/L			01/29/20 01:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW6-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 01:48	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 01:48	1
Hexane	ND		10		ug/L			01/29/20 01:48	1
Iodomethane	ND		1.0		ug/L			01/29/20 01:48	1
Isobutanol	ND		25		ug/L			01/29/20 01:48	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 01:48	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 01:48	1
Methyl acetate	ND		2.5		ug/L			01/29/20 01:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 01:48	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 01:48	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 01:48	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 01:48	1
Naphthalene	ND		1.0		ug/L			01/29/20 01:48	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 01:48	1
o-Xylene	ND		1.0		ug/L			01/29/20 01:48	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 01:48	1
p-Cymene	ND		1.0		ug/L			01/29/20 01:48	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
Styrene	ND		1.0		ug/L			01/29/20 01:48	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 01:48	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 01:48	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 01:48	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 01:48	1
Toluene	ND		1.0		ug/L			01/29/20 01:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 01:48	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 01:48	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 01:48	1
Trichloroethene	ND		1.0		ug/L			01/29/20 01:48	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 01:48	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 01:48	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 01:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 01:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*01/29/20 01:48*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*01/29/20 01:48*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*01/29/20 01:48*	*1*

Client Sample ID: MW13D-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 02:11	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 02:11	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW13D-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 02:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 02:11	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 02:11	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 02:11	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 02:11	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 02:11	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 02:11	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 02:11	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 02:11	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 02:11	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 02:11	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 02:11	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 02:11	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:11	1
1,4-Dioxane	ND		40		ug/L			01/29/20 02:11	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 02:11	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 02:11	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 02:11	1
2-Hexanone	ND		5.0		ug/L			01/29/20 02:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 02:11	1
Acetone	ND		10		ug/L			01/29/20 02:11	1
Acetonitrile	ND		15		ug/L			01/29/20 02:11	1
Acrolein	ND		20		ug/L			01/29/20 02:11	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 02:11	1
Benzene	ND		1.0		ug/L			01/29/20 02:11	1
Bromobenzene	ND		1.0		ug/L			01/29/20 02:11	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 02:11	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 02:11	1
Bromoform	ND		1.0		ug/L			01/29/20 02:11	1
Bromomethane	ND		1.0		ug/L			01/29/20 02:11	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 02:11	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 02:11	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 02:11	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 02:11	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 02:11	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 02:11	1
Chloroethane	ND		1.0		ug/L			01/29/20 02:11	1
Chloroform	ND		1.0		ug/L			01/29/20 02:11	1
Chloromethane	ND		1.0		ug/L			01/29/20 02:11	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 02:11	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 02:11	1
Cyclohexane	ND		1.0		ug/L			01/29/20 02:11	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW13D-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0		ug/L			01/29/20 02:11	1
Dibromomethane	ND		1.0		ug/L			01/29/20 02:11	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 02:11	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 02:11	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 02:11	1
Ethyl ether	ND		1.0		ug/L			01/29/20 02:11	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 02:11	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 02:11	1
Hexane	ND		10		ug/L			01/29/20 02:11	1
Iodomethane	ND		1.0		ug/L			01/29/20 02:11	1
Isobutanol	ND		25		ug/L			01/29/20 02:11	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 02:11	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 02:11	1
Methyl acetate	ND		2.5		ug/L			01/29/20 02:11	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 02:11	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 02:11	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 02:11	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 02:11	1
Naphthalene	ND		1.0		ug/L			01/29/20 02:11	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 02:11	1
o-Xylene	ND		1.0		ug/L			01/29/20 02:11	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 02:11	1
p-Cymene	ND		1.0		ug/L			01/29/20 02:11	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
Styrene	ND		1.0		ug/L			01/29/20 02:11	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 02:11	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 02:11	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 02:11	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 02:11	1
Toluene	ND		1.0		ug/L			01/29/20 02:11	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 02:11	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 02:11	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 02:11	1
Trichloroethene	ND		1.0		ug/L			01/29/20 02:11	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 02:11	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 02:11	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 02:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 02:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*01/29/20 02:11*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*01/29/20 02:11*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/29/20 02:11*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Client Sample ID: SW7-012220
Date Collected: 01/22/20 15:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 02:33	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 02:33	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 02:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 02:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 02:33	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 02:33	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 02:33	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 02:33	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 02:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 02:33	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 02:33	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 02:33	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 02:33	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 02:33	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 02:33	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:33	1
1,4-Dioxane	ND		40		ug/L			01/29/20 02:33	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 02:33	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 02:33	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 02:33	1
2-Hexanone	ND		5.0		ug/L			01/29/20 02:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 02:33	1
Acetone	ND		10		ug/L			01/29/20 02:33	1
Acetonitrile	ND		15		ug/L			01/29/20 02:33	1
Acrolein	ND		20		ug/L			01/29/20 02:33	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 02:33	1
Benzene	ND		1.0		ug/L			01/29/20 02:33	1
Bromobenzene	ND		1.0		ug/L			01/29/20 02:33	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 02:33	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 02:33	1
Bromoform	ND		1.0		ug/L			01/29/20 02:33	1
Bromomethane	ND		1.0		ug/L			01/29/20 02:33	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 02:33	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 02:33	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 02:33	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 02:33	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 02:33	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 02:33	1
Chloroethane	ND		1.0		ug/L			01/29/20 02:33	1
Chloroform	ND		1.0		ug/L			01/29/20 02:33	1
Chloromethane	ND		1.0		ug/L			01/29/20 02:33	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 02:33	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW7-012220
Date Collected: 01/22/20 15:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 02:33	1
Cyclohexane	ND		1.0		ug/L			01/29/20 02:33	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 02:33	1
Dibromomethane	ND		1.0		ug/L			01/29/20 02:33	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 02:33	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 02:33	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 02:33	1
Ethyl ether	ND		1.0		ug/L			01/29/20 02:33	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 02:33	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 02:33	1
Hexane	ND		10		ug/L			01/29/20 02:33	1
Iodomethane	ND		1.0		ug/L			01/29/20 02:33	1
Isobutanol	ND		25		ug/L			01/29/20 02:33	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 02:33	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 02:33	1
Methyl acetate	ND		2.5		ug/L			01/29/20 02:33	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 02:33	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 02:33	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 02:33	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 02:33	1
Naphthalene	ND		1.0		ug/L			01/29/20 02:33	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 02:33	1
o-Xylene	ND		1.0		ug/L			01/29/20 02:33	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 02:33	1
p-Cymene	ND		1.0		ug/L			01/29/20 02:33	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
Styrene	ND		1.0		ug/L			01/29/20 02:33	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 02:33	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 02:33	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 02:33	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 02:33	1
Toluene	ND		1.0		ug/L			01/29/20 02:33	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 02:33	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 02:33	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 02:33	1
Trichloroethene	ND		1.0		ug/L			01/29/20 02:33	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 02:33	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 02:33	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 02:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 02:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*01/29/20 02:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*01/29/20 02:33*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: SW7-012220
Date Collected: 01/22/20 15:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/29/20 02:33*	*1*

Client Sample ID: MW6-012220
Date Collected: 01/22/20 16:30
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 02:57	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 02:57	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 02:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 02:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 02:57	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 02:57	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 02:57	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 02:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 02:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 02:57	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 02:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 02:57	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 02:57	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 02:57	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 02:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 02:57	1
1,4-Dioxane	ND		40		ug/L			01/29/20 02:57	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 02:57	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 02:57	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 02:57	1
2-Hexanone	ND		5.0		ug/L			01/29/20 02:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 02:57	1
Acetone	ND		10		ug/L			01/29/20 02:57	1
Acetonitrile	ND		15		ug/L			01/29/20 02:57	1
Acrolein	ND		20		ug/L			01/29/20 02:57	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 02:57	1
Benzene	ND		1.0		ug/L			01/29/20 02:57	1
Bromobenzene	ND		1.0		ug/L			01/29/20 02:57	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 02:57	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 02:57	1
Bromoform	ND		1.0		ug/L			01/29/20 02:57	1
Bromomethane	ND		1.0		ug/L			01/29/20 02:57	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 02:57	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 02:57	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 02:57	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 02:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW6-012220
Date Collected: 01/22/20 16:30
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0		ug/L			01/29/20 02:57	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 02:57	1
Chloroethane	ND		1.0		ug/L			01/29/20 02:57	1
Chloroform	ND		1.0		ug/L			01/29/20 02:57	1
Chloromethane	ND		1.0		ug/L			01/29/20 02:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 02:57	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 02:57	1
Cyclohexane	ND		1.0		ug/L			01/29/20 02:57	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 02:57	1
Dibromomethane	ND		1.0		ug/L			01/29/20 02:57	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 02:57	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 02:57	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 02:57	1
Ethyl ether	ND		1.0		ug/L			01/29/20 02:57	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 02:57	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 02:57	1
Hexane	ND		10		ug/L			01/29/20 02:57	1
Iodomethane	ND		1.0		ug/L			01/29/20 02:57	1
Isobutanol	ND		25		ug/L			01/29/20 02:57	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 02:57	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 02:57	1
Methyl acetate	ND		2.5		ug/L			01/29/20 02:57	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 02:57	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 02:57	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 02:57	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 02:57	1
Naphthalene	ND		1.0		ug/L			01/29/20 02:57	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 02:57	1
o-Xylene	ND		1.0		ug/L			01/29/20 02:57	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 02:57	1
p-Cymene	ND		1.0		ug/L			01/29/20 02:57	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
Styrene	ND		1.0		ug/L			01/29/20 02:57	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 02:57	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 02:57	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 02:57	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 02:57	1
Toluene	ND		1.0		ug/L			01/29/20 02:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 02:57	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 02:57	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 02:57	1
Trichloroethene	ND		1.0		ug/L			01/29/20 02:57	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 02:57	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 02:57	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 02:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Hexachloroethane TIC	ND		ug/L			67-72-1		01/29/20 02:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		01/29/20 02:57	1
4-Bromofluorobenzene (Surr)	102		73 - 120		01/29/20 02:57	1
Toluene-d8 (Surr)	99		80 - 120		01/29/20 02:57	1

Client Sample ID: MW14-012220
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 03:20	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 03:20	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 03:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 03:20	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 03:20	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 03:20	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 03:20	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 03:20	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 03:20	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 03:20	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 03:20	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 03:20	1
1,2-Dichloroethene, Total	**2.0**		2.0		ug/L			01/29/20 03:20	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 03:20	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 03:20	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 03:20	1
1,4-Dioxane	ND		40		ug/L			01/29/20 03:20	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 03:20	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 03:20	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 03:20	1
2-Hexanone	ND		5.0		ug/L			01/29/20 03:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 03:20	1
Acetone	ND		10		ug/L			01/29/20 03:20	1
Acetonitrile	ND		15		ug/L			01/29/20 03:20	1
Acrolein	ND		20		ug/L			01/29/20 03:20	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 03:20	1
Benzene	ND		1.0		ug/L			01/29/20 03:20	1
Bromobenzene	ND		1.0		ug/L			01/29/20 03:20	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 03:20	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 03:20	1
Bromoform	ND		1.0		ug/L			01/29/20 03:20	1
Bromomethane	ND		1.0		ug/L			01/29/20 03:20	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 03:20	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 03:20	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW14-012220
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		1.0		ug/L			01/29/20 03:20	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 03:20	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 03:20	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 03:20	1
Chloroethane	ND		1.0		ug/L			01/29/20 03:20	1
Chloroform	ND		1.0		ug/L			01/29/20 03:20	1
Chloromethane	ND		1.0		ug/L			01/29/20 03:20	1
cis-1,2-Dichloroethene	**2.0**		1.0		ug/L			01/29/20 03:20	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 03:20	1
Cyclohexane	ND		1.0		ug/L			01/29/20 03:20	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 03:20	1
Dibromomethane	ND		1.0		ug/L			01/29/20 03:20	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 03:20	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 03:20	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 03:20	1
Ethyl ether	ND		1.0		ug/L			01/29/20 03:20	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 03:20	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 03:20	1
Hexane	ND		10		ug/L			01/29/20 03:20	1
Iodomethane	ND		1.0		ug/L			01/29/20 03:20	1
Isobutanol	ND		25		ug/L			01/29/20 03:20	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 03:20	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 03:20	1
Methyl acetate	ND		2.5		ug/L			01/29/20 03:20	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 03:20	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 03:20	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 03:20	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 03:20	1
Naphthalene	ND		1.0		ug/L			01/29/20 03:20	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 03:20	1
o-Xylene	ND		1.0		ug/L			01/29/20 03:20	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 03:20	1
p-Cymene	ND		1.0		ug/L			01/29/20 03:20	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
Styrene	ND		1.0		ug/L			01/29/20 03:20	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 03:20	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 03:20	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 03:20	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 03:20	1
Toluene	ND		1.0		ug/L			01/29/20 03:20	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 03:20	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 03:20	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 03:20	1
Trichloroethene	ND		1.0		ug/L			01/29/20 03:20	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 03:20	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW14-012220
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		5.0		ug/L			01/29/20 03:20	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 03:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 03:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*01/29/20 03:20*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*01/29/20 03:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/29/20 03:20*	*1*

Client Sample ID: MW20DD-012220
Date Collected: 01/22/20 00:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 03:43	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 03:43	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 03:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 03:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 03:43	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 03:43	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 03:43	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 03:43	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 03:43	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 03:43	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 03:43	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 03:43	1
1,2-Dichloroethene, Total	**2.0**		2.0		ug/L			01/29/20 03:43	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 03:43	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 03:43	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 03:43	1
1,4-Dioxane	ND		40		ug/L			01/29/20 03:43	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 03:43	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 03:43	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 03:43	1
2-Hexanone	ND		5.0		ug/L			01/29/20 03:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 03:43	1
Acetone	ND		10		ug/L			01/29/20 03:43	1
Acetonitrile	ND		15		ug/L			01/29/20 03:43	1
Acrolein	ND		20		ug/L			01/29/20 03:43	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 03:43	1
Benzene	ND		1.0		ug/L			01/29/20 03:43	1
Bromobenzene	ND		1.0		ug/L			01/29/20 03:43	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW20DD-012220
Date Collected: 01/22/20 00:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0		ug/L			01/29/20 03:43	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 03:43	1
Bromoform	ND		1.0		ug/L			01/29/20 03:43	1
Bromomethane	ND		1.0		ug/L			01/29/20 03:43	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 03:43	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 03:43	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 03:43	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 03:43	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 03:43	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 03:43	1
Chloroethane	ND		1.0		ug/L			01/29/20 03:43	1
Chloroform	ND		1.0		ug/L			01/29/20 03:43	1
Chloromethane	ND		1.0		ug/L			01/29/20 03:43	1
cis-1,2-Dichloroethene	**2.0**		1.0		ug/L			01/29/20 03:43	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 03:43	1
Cyclohexane	ND		1.0		ug/L			01/29/20 03:43	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 03:43	1
Dibromomethane	ND		1.0		ug/L			01/29/20 03:43	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 03:43	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 03:43	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 03:43	1
Ethyl ether	ND		1.0		ug/L			01/29/20 03:43	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 03:43	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 03:43	1
Hexane	ND		10		ug/L			01/29/20 03:43	1
Iodomethane	ND		1.0		ug/L			01/29/20 03:43	1
Isobutanol	ND		25		ug/L			01/29/20 03:43	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 03:43	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 03:43	1
Methyl acetate	ND		2.5		ug/L			01/29/20 03:43	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 03:43	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 03:43	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 03:43	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 03:43	1
Naphthalene	ND		1.0		ug/L			01/29/20 03:43	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 03:43	1
o-Xylene	ND		1.0		ug/L			01/29/20 03:43	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 03:43	1
p-Cymene	ND		1.0		ug/L			01/29/20 03:43	1
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
Styrene	ND		1.0		ug/L			01/29/20 03:43	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 03:43	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 03:43	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 03:43	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 03:43	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: MW20DD-012220
Date Collected: 01/22/20 00:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0		ug/L			01/29/20 03:43	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 03:43	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 03:43	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 03:43	1
Trichloroethene	ND		1.0		ug/L			01/29/20 03:43	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 03:43	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 03:43	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 03:43	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 03:43*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*01/29/20 03:43*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*01/29/20 03:43*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/29/20 03:43*	*1*

Client Sample ID: TB1
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 04:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/29/20 04:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/29/20 04:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/29/20 04:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/29/20 04:05	1
1,1-Dichloroethane	ND		1.0		ug/L			01/29/20 04:05	1
1,1-Dichloroethene	ND		1.0		ug/L			01/29/20 04:05	1
1,1-Dichloropropene	ND		1.0		ug/L			01/29/20 04:05	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/29/20 04:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/29/20 04:05	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/29/20 04:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,2-Dichloroethane	ND		1.0		ug/L			01/29/20 04:05	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/29/20 04:05	1
1,2-Dichloropropane	ND		1.0		ug/L			01/29/20 04:05	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,3-Dichloropropane	ND		1.0		ug/L			01/29/20 04:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/29/20 04:05	1
1,4-Dioxane	ND		40		ug/L			01/29/20 04:05	1
2,2-Dichloropropane	ND		1.0		ug/L			01/29/20 04:05	1
2-Butanone (MEK)	ND		10		ug/L			01/29/20 04:05	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/29/20 04:05	1
2-Hexanone	ND		5.0		ug/L			01/29/20 04:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/29/20 04:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: TB1
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			01/29/20 04:05	1
Acetonitrile	ND		15		ug/L			01/29/20 04:05	1
Acrolein	ND		20		ug/L			01/29/20 04:05	1
Acrylonitrile	ND		5.0		ug/L			01/29/20 04:05	1
Benzene	ND		1.0		ug/L			01/29/20 04:05	1
Bromobenzene	ND		1.0		ug/L			01/29/20 04:05	1
Bromochloromethane	ND		1.0		ug/L			01/29/20 04:05	1
Bromodichloromethane	ND		1.0		ug/L			01/29/20 04:05	1
Bromoform	ND		1.0		ug/L			01/29/20 04:05	1
Bromomethane	ND		1.0		ug/L			01/29/20 04:05	1
Butyl alcohol, n-	ND		40		ug/L			01/29/20 04:05	1
Butyl alcohol, tert-	ND		10		ug/L			01/29/20 04:05	1
Carbon disulfide	ND		1.0		ug/L			01/29/20 04:05	1
Carbon tetrachloride	ND		1.0		ug/L			01/29/20 04:05	1
Chlorobenzene	ND		1.0		ug/L			01/29/20 04:05	1
Chlorodifluoromethane	ND		1.0		ug/L			01/29/20 04:05	1
Chloroethane	ND		1.0		ug/L			01/29/20 04:05	1
Chloroform	ND		1.0		ug/L			01/29/20 04:05	1
Chloromethane	ND		1.0		ug/L			01/29/20 04:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 04:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 04:05	1
Cyclohexane	ND		1.0		ug/L			01/29/20 04:05	1
Dibromochloromethane	ND		1.0		ug/L			01/29/20 04:05	1
Dibromomethane	ND		1.0		ug/L			01/29/20 04:05	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/29/20 04:05	1
Dichlorofluoromethane	ND		1.0		ug/L			01/29/20 04:05	1
Ethyl acetate	ND		1.0		ug/L			01/29/20 04:05	1
Ethyl ether	ND		1.0		ug/L			01/29/20 04:05	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/29/20 04:05	1
Ethylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
Hexachlorobutadiene	ND		2.0		ug/L			01/29/20 04:05	1
Hexane	ND		10		ug/L			01/29/20 04:05	1
Iodomethane	ND		1.0		ug/L			01/29/20 04:05	1
Isobutanol	ND		25		ug/L			01/29/20 04:05	1
Isopropyl ether	ND		1.0		ug/L			01/29/20 04:05	1
Isopropylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
Methacrylonitrile	ND		5.0		ug/L			01/29/20 04:05	1
Methyl acetate	ND		2.5		ug/L			01/29/20 04:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/29/20 04:05	1
Methylcyclohexane	ND		1.0		ug/L			01/29/20 04:05	1
Methylene Chloride	ND		1.0		ug/L			01/29/20 04:05	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/29/20 04:05	1
Naphthalene	ND		1.0		ug/L			01/29/20 04:05	1
n-Butylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
N-Propylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
o-Chlorotoluene	ND		1.0		ug/L			01/29/20 04:05	1
o-Xylene	ND		1.0		ug/L			01/29/20 04:05	1
p-Chlorotoluene	ND		1.0		ug/L			01/29/20 04:05	1
p-Cymene	ND		1.0		ug/L			01/29/20 04:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Client Sample ID: TB1
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
Styrene	ND		1.0		ug/L			01/29/20 04:05	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/29/20 04:05	1
tert-Butylbenzene	ND		1.0		ug/L			01/29/20 04:05	1
Tetrachloroethene	ND		1.0		ug/L			01/29/20 04:05	1
Tetrahydrofuran	ND		5.0		ug/L			01/29/20 04:05	1
Toluene	ND		1.0		ug/L			01/29/20 04:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/29/20 04:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/29/20 04:05	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/29/20 04:05	1
Trichloroethene	ND		1.0		ug/L			01/29/20 04:05	1
Trichlorofluoromethane	ND		1.0		ug/L			01/29/20 04:05	1
Vinyl acetate	ND		5.0		ug/L			01/29/20 04:05	1
Vinyl chloride	ND		1.0		ug/L			01/29/20 04:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Hexachloroethane TIC	*ND*		*ug/L*			*67-72-1*		*01/29/20 04:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*01/29/20 04:05*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*01/29/20 04:05*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*01/29/20 04:05*	*1*

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: MW7-012220
Date Collected: 01/22/20 08:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		1.0		ug/L		01/28/20 16:20	01/30/20 00:40	1

Client Sample ID: MW5-012220
Date Collected: 01/22/20 10:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		1.0		ug/L		01/28/20 16:20	01/30/20 00:58	1

Client Sample ID: SW1-012220
Date Collected: 01/22/20 11:55
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		1.0		ug/L		01/28/20 09:00	01/29/20 23:25	1

Client Sample ID: MW12I-012220
Date Collected: 01/22/20 12:15
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**30**		1.0		ug/L		01/28/20 09:00	01/29/20 23:43	1

Method: 6020 - Metals (ICP/MS) - Dissolved

Client Sample ID: SW4-012220
Date Collected: 01/22/20 13:05
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**36**		1.0		ug/L		01/28/20 09:00	01/29/20 23:46	1

Client Sample ID: SW6-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**35**		1.0		ug/L		01/28/20 09:00	01/29/20 23:57	1

Client Sample ID: MW13D-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**5.6**		1.0		ug/L		01/28/20 09:00	01/30/20 00:00	1

Client Sample ID: SW7-012220
Date Collected: 01/22/20 15:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**3.6**		1.0		ug/L		01/28/20 09:00	01/30/20 00:04	1

Client Sample ID: MW6-012220
Date Collected: 01/22/20 16:30
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**420**		1.0		ug/L		01/28/20 09:00	01/30/20 00:08	1

Client Sample ID: MW14-012220
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1500**		1.0		ug/L		01/28/20 09:00	01/30/20 00:11	1

Client Sample ID: MW20DD-012220
Date Collected: 01/22/20 00:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1500**		1.0		ug/L		01/28/20 09:00	01/30/20 00:15	1

General Chemistry

Client Sample ID: MW7-012220
Date Collected: 01/22/20 08:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			01/27/20 19:28	1
Sulfate	ND		5.0		mg/L			01/27/20 19:28	1
Ammonia as N	ND		0.030		mg/L			01/30/20 14:01	1
Total Alkalinity	**120**		10		mg/L			01/28/20 17:18	1
Bicarbonate Alkalinity	**120**		10		mg/L			01/28/20 17:18	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 17:18	1
Total Organic Carbon - Average	**1.7**		1.0		mg/L			01/28/20 04:54	1

General Chemistry

Client Sample ID: MW5-012220
Date Collected: 01/22/20 10:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			01/27/20 19:45	1
Sulfate	**6.8**		5.0		mg/L			01/27/20 19:45	1
Ammonia as N	ND		0.030		mg/L			01/31/20 14:50	1
Total Alkalinity	**69**		10		mg/L			01/28/20 17:23	1
Bicarbonate Alkalinity	**69**		10		mg/L			01/28/20 17:23	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 17:23	1
Total Organic Carbon - Average	ND		1.0		mg/L			01/28/20 06:14	1

Client Sample ID: SW1-012220
Date Collected: 01/22/20 11:55
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.8**		3.0		mg/L			01/27/20 20:01	1
Sulfate	**7.8**		5.0		mg/L			01/27/20 20:01	1
Ammonia as N	ND		0.030		mg/L			01/30/20 14:05	1
Total Alkalinity	**70**		10		mg/L			01/28/20 17:28	1
Bicarbonate Alkalinity	**70**		10		mg/L			01/28/20 17:28	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 17:28	1
Total Organic Carbon - Average	**3.6**		1.0		mg/L			01/28/20 06:34	1

Client Sample ID: MW12I-012220
Date Collected: 01/22/20 12:15
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			01/27/20 20:18	1
Sulfate	ND		5.0		mg/L			01/27/20 20:18	1
Ammonia as N	ND		0.030		mg/L			01/30/20 14:07	1
Total Alkalinity	**74**		10		mg/L			01/28/20 17:32	1
Bicarbonate Alkalinity	**74**		10		mg/L			01/28/20 17:32	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 17:32	1
Total Organic Carbon - Average	**2.2**		1.0		mg/L			01/28/20 06:51	1

Client Sample ID: SW4-012220
Date Collected: 01/22/20 13:05
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.7**		3.0		mg/L			01/27/20 20:34	1
Sulfate	**10**		5.0		mg/L			01/27/20 20:34	1
Ammonia as N	ND		0.030		mg/L			01/30/20 14:09	1
Total Alkalinity	**110**		10		mg/L			01/28/20 17:38	1
Bicarbonate Alkalinity	**110**		10		mg/L			01/28/20 17:38	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 17:38	1
Total Organic Carbon - Average	**15**		1.0		mg/L			01/28/20 07:07	1

Client Sample ID: SW6-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.3**		3.0		mg/L			01/27/20 20:50	1
Sulfate	ND		5.0		mg/L			01/27/20 20:50	1

General Chemistry (Continued)

Client Sample ID: SW6-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	**0.037**		0.030		mg/L			01/30/20 14:11	1
Total Alkalinity	**31**		10		mg/L			01/28/20 17:54	1
Bicarbonate Alkalinity	**31**		10		mg/L			01/28/20 17:54	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 17:54	1
Total Organic Carbon - Average	**27**		1.0		mg/L			01/28/20 07:24	1

Client Sample ID: MW13D-012220
Date Collected: 01/22/20 13:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.3**		3.0		mg/L			01/27/20 22:29	1
Sulfate	**13**		5.0		mg/L			01/27/20 22:29	1
Ammonia as N	ND		0.030		mg/L			01/30/20 14:13	1
Total Alkalinity	**75**		10		mg/L			01/28/20 17:59	1
Bicarbonate Alkalinity	**75**		10		mg/L			01/28/20 17:59	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 17:59	1
Total Organic Carbon - Average	ND		1.0		mg/L			01/28/20 07:39	1

Client Sample ID: SW7-012220
Date Collected: 01/22/20 15:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.3**		3.0		mg/L			01/27/20 22:45	1
Sulfate	**6.0**		5.0		mg/L			01/27/20 22:45	1
Ammonia as N	**0.039**		0.030		mg/L			01/30/20 14:15	1
Total Alkalinity	**37**		10		mg/L			01/28/20 18:04	1
Bicarbonate Alkalinity	**37**		10		mg/L			01/28/20 18:04	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 18:04	1
Total Organic Carbon - Average	**14**		1.0		mg/L			01/28/20 07:55	1

Client Sample ID: MW6-012220
Date Collected: 01/22/20 16:30
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.6**		3.0		mg/L			01/27/20 23:02	1
Sulfate	**21**		5.0		mg/L			01/27/20 23:02	1
Ammonia as N	**0.030**		0.030		mg/L			01/30/20 14:17	1
Total Alkalinity	**170**		10		mg/L			01/28/20 18:09	1
Bicarbonate Alkalinity	**170**		10		mg/L			01/28/20 18:09	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 18:09	1
Total Organic Carbon - Average	**1.2**		1.0		mg/L			01/28/20 08:10	1

Client Sample ID: MW14-012220
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			01/27/20 23:18	1
Sulfate	**7.3**		5.0		mg/L			01/27/20 23:18	1
Ammonia as N	ND		0.030		mg/L			01/30/20 14:35	1
Total Alkalinity	**86**		10		mg/L			01/28/20 18:14	1

General Chemistry (Continued)

Client Sample ID: MW14-012220
Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity	**86**		10		mg/L			01/28/20 18:14	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 18:14	1
Total Organic Carbon - Average	**1.6**		1.0		mg/L			01/28/20 08:27	1

Client Sample ID: MW20DD-012220
Date Collected: 01/22/20 00:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			01/27/20 23:34	1
Sulfate	**7.2**		5.0		mg/L			01/27/20 23:34	1
Ammonia as N	**0.043**		0.030		mg/L			01/30/20 14:37	1
Total Alkalinity	**86**		10		mg/L			01/28/20 18:19	1
Bicarbonate Alkalinity	**86**		10		mg/L			01/28/20 18:19	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 18:19	1
Total Organic Carbon - Average	**1.6**		1.0		mg/L			01/28/20 09:18	1

Surrogate Summary

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	DCA (77-120)	BFB (73-120)	TOL (80-120)
280-133169-1	MW7-012220	101	102	100
280-133169-2	MW5-012220	99	103	100
280-133169-3	SW1-012220	100	102	101
280-133169-4	MW12I-012220	100	102	101
280-133169-5	SW4-012220	101	102	100
280-133169-6	SW6-012220	100	100	99
280-133169-7	MW13D-012220	100	102	101
280-133169-8	SW7-012220	100	101	101
280-133169-9	MW6-012220	101	102	99
280-133169-10	MW14-012220	99	102	100
280-133169-11	MW20DD-012220	100	102	101
280-133169-12	TB1	100	101	100
480-165573-F-1 MS	Matrix Spike	99	101	102
480-165573-F-1 MSD	Matrix Spike Duplicate	100	100	103
LCS 480-515292/4	Lab Control Sample	99	101	101
MB 480-515292/6	Method Blank	101	101	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DBFM (50-150)	TBA (50-150)
280-133169-1	MW7-012220	136	127
280-133169-2	MW5-012220	134	126
280-133169-3	SW1-012220	139	134
280-133169-4	MW12I-012220	134	127
280-133169-5	SW4-012220	137	126
280-133169-6	SW6-012220	137	121
280-133169-7	MW13D-012220	142	132
280-133169-8	SW7-012220	137	126
280-133169-9	MW6-012220	137	137
280-133169-10	MW14-012220	134	121
280-133169-11	MW20DD-012220	134	128
280-133169-12	TB1	137	131
LCS 480-515649/6	Lab Control Sample	118	114
LCSD 480-515649/7	Lab Control Sample Dup	117	143
MB 480-515649/9	Method Blank	131	120

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TBA = TBA-d9 (Surr)

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-515292/6
Matrix: Water
Analysis Batch: 515292

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			01/28/20 22:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/28/20 22:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/28/20 22:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			01/28/20 22:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/28/20 22:04	1
1,1-Dichloroethane	ND		1.0		ug/L			01/28/20 22:04	1
1,1-Dichloroethene	ND		1.0		ug/L			01/28/20 22:04	1
1,1-Dichloropropene	ND		1.0		ug/L			01/28/20 22:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/28/20 22:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			01/28/20 22:04	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/28/20 22:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,2-Dichloroethane	ND		1.0		ug/L			01/28/20 22:04	1
1,2-Dichloroethene, Total	ND		2.0		ug/L			01/28/20 22:04	1
1,2-Dichloropropane	ND		1.0		ug/L			01/28/20 22:04	1
1,3,5-Trichlorobenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,3-Dichloropropane	ND		1.0		ug/L			01/28/20 22:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/28/20 22:04	1
1,4-Dioxane	ND		40		ug/L			01/28/20 22:04	1
2,2-Dichloropropane	ND		1.0		ug/L			01/28/20 22:04	1
2-Butanone (MEK)	ND		10		ug/L			01/28/20 22:04	1
2-Chloroethyl vinyl ether	ND		5.0		ug/L			01/28/20 22:04	1
2-Hexanone	ND		5.0		ug/L			01/28/20 22:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			01/28/20 22:04	1
Acetone	ND		10		ug/L			01/28/20 22:04	1
Acetonitrile	ND		15		ug/L			01/28/20 22:04	1
Acrolein	ND		20		ug/L			01/28/20 22:04	1
Acrylonitrile	ND		5.0		ug/L			01/28/20 22:04	1
Benzene	ND		1.0		ug/L			01/28/20 22:04	1
Bromobenzene	ND		1.0		ug/L			01/28/20 22:04	1
Bromochloromethane	ND		1.0		ug/L			01/28/20 22:04	1
Bromodichloromethane	ND		1.0		ug/L			01/28/20 22:04	1
Bromoform	ND		1.0		ug/L			01/28/20 22:04	1
Bromomethane	ND		1.0		ug/L			01/28/20 22:04	1
Butyl alcohol, n-	ND		40		ug/L			01/28/20 22:04	1
Butyl alcohol, tert-	ND		10		ug/L			01/28/20 22:04	1
Carbon disulfide	ND		1.0		ug/L			01/28/20 22:04	1
Carbon tetrachloride	ND		1.0		ug/L			01/28/20 22:04	1
Chlorobenzene	ND		1.0		ug/L			01/28/20 22:04	1
Chlorodifluoromethane	ND		1.0		ug/L			01/28/20 22:04	1
Chloroethane	ND		1.0		ug/L			01/28/20 22:04	1
Chloroform	ND		1.0		ug/L			01/28/20 22:04	1
Chloromethane	ND		1.0		ug/L			01/28/20 22:04	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-515292/6
Matrix: Water
Analysis Batch: 515292

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/28/20 22:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			01/28/20 22:04	1
Cyclohexane	ND		1.0		ug/L			01/28/20 22:04	1
Dibromochloromethane	ND		1.0		ug/L			01/28/20 22:04	1
Dibromomethane	ND		1.0		ug/L			01/28/20 22:04	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/28/20 22:04	1
Dichlorofluoromethane	ND		1.0		ug/L			01/28/20 22:04	1
Ethyl acetate	ND		1.0		ug/L			01/28/20 22:04	1
Ethyl ether	ND		1.0		ug/L			01/28/20 22:04	1
Ethyl tert-butyl ether	ND		1.0		ug/L			01/28/20 22:04	1
Ethylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
Hexachlorobutadiene	ND		2.0		ug/L			01/28/20 22:04	1
Hexane	ND		10		ug/L			01/28/20 22:04	1
Iodomethane	ND		1.0		ug/L			01/28/20 22:04	1
Isobutanol	ND		25		ug/L			01/28/20 22:04	1
Isopropyl ether	ND		1.0		ug/L			01/28/20 22:04	1
Isopropylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
Methacrylonitrile	ND		5.0		ug/L			01/28/20 22:04	1
Methyl acetate	ND		2.5		ug/L			01/28/20 22:04	1
Methyl tert-butyl ether	ND		1.0		ug/L			01/28/20 22:04	1
Methylcyclohexane	ND		1.0		ug/L			01/28/20 22:04	1
Methylene Chloride	ND		1.0		ug/L			01/28/20 22:04	1
m-Xylene & p-Xylene	ND		2.0		ug/L			01/28/20 22:04	1
Naphthalene	ND		1.0		ug/L			01/28/20 22:04	1
n-Butylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
N-Propylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
o-Chlorotoluene	ND		1.0		ug/L			01/28/20 22:04	1
o-Xylene	ND		1.0		ug/L			01/28/20 22:04	1
p-Chlorotoluene	ND		1.0		ug/L			01/28/20 22:04	1
p-Cymene	ND		1.0		ug/L			01/28/20 22:04	1
sec-Butylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
Styrene	ND		1.0		ug/L			01/28/20 22:04	1
Tert-amyl methyl ether	ND		1.0		ug/L			01/28/20 22:04	1
tert-Butylbenzene	ND		1.0		ug/L			01/28/20 22:04	1
Tetrachloroethene	ND		1.0		ug/L			01/28/20 22:04	1
Tetrahydrofuran	ND		5.0		ug/L			01/28/20 22:04	1
Toluene	ND		1.0		ug/L			01/28/20 22:04	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/28/20 22:04	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			01/28/20 22:04	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			01/28/20 22:04	1
Trichloroethene	ND		1.0		ug/L			01/28/20 22:04	1
Trichlorofluoromethane	ND		1.0		ug/L			01/28/20 22:04	1
Vinyl acetate	ND		5.0		ug/L			01/28/20 22:04	1
Vinyl chloride	ND		1.0		ug/L			01/28/20 22:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*01/28/20 22:04*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*01/28/20 22:04*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-515292/6
Matrix: Water
Analysis Batch: 515292

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		01/28/20 22:04	1

Lab Sample ID: LCS 480-515292/4
Matrix: Water
Analysis Batch: 515292

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	24.9		ug/L		100	80 - 120
1,1,1-Trichloroethane	25.0	25.3		ug/L		101	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.9		ug/L		116	61 - 148
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122
1,1-Dichloroethane	25.0	24.2		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	25.5		ug/L		102	66 - 127
1,1-Dichloropropene	25.0	25.6		ug/L		102	72 - 122
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	75 - 123
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	68 - 122
1,2,4-Trichlorobenzene	25.0	25.0		ug/L		100	79 - 122
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	56 - 134
1,2-Dibromoethane (EDB)	25.0	24.2		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	22.9		ug/L		91	75 - 120
1,2-Dichloroethene, Total	50.0	49.6		ug/L		99	72 - 124
1,2-Dichloropropane	25.0	24.1		ug/L		96	76 - 120
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	77 - 121
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	77 - 120
1,3-Dichloropropane	25.0	24.4		ug/L		97	75 - 120
1,4-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 120
1,4-Dioxane	500	458		ug/L		92	50 - 150
2,2-Dichloropropane	25.0	24.7		ug/L		99	63 - 136
2-Butanone (MEK)	125	106		ug/L		84	57 - 140
2-Chloroethyl vinyl ether	25.0	26.9		ug/L		108	70 - 129
2-Hexanone	125	117		ug/L		93	65 - 127
4-Methyl-2-pentanone (MIBK)	125	114		ug/L		91	71 - 125
Acetone	125	105		ug/L		84	56 - 142
Acrolein	125	113		ug/L		90	52 - 143
Acrylonitrile	250	233		ug/L		93	63 - 125
Benzene	25.0	24.4		ug/L		98	71 - 124
Bromobenzene	25.0	24.4		ug/L		98	78 - 120
Bromochloromethane	25.0	24.5		ug/L		98	72 - 130
Bromodichloromethane	25.0	23.7		ug/L		95	80 - 122
Bromoform	25.0	24.6		ug/L		98	61 - 132
Bromomethane	25.0	23.9		ug/L		96	55 - 144
Butyl alcohol, tert-	250	216		ug/L		86	75 - 125
Carbon disulfide	25.0	24.7		ug/L		99	59 - 134
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 134
Chlorobenzene	25.0	24.9		ug/L		100	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-515292/4
Matrix: Water
Analysis Batch: 515292

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	21.8		ug/L		87	69 - 136
Chloroform	25.0	23.2		ug/L		93	73 - 127
Chloromethane	25.0	21.4		ug/L		85	68 - 124
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	24.3		ug/L		97	74 - 124
Cyclohexane	25.0	27.1		ug/L		108	59 - 135
Dibromochloromethane	25.0	24.1		ug/L		96	75 - 125
Dibromomethane	25.0	23.9		ug/L		96	76 - 127
Dichlorodifluoromethane	25.0	24.4		ug/L		97	59 - 135
Dichlorofluoromethane	25.0	23.2		ug/L		93	76 - 127
Ethyl ether	25.0	24.1		ug/L		96	76 - 123
Ethylbenzene	25.0	24.7		ug/L		99	77 - 123
Hexachlorobutadiene	25.0	26.1		ug/L		104	68 - 131
Hexane	25.0	28.5		ug/L		114	54 - 146
Iodomethane	25.0	24.2		ug/L		97	78 - 123
Isobutanol	625	513		ug/L		82	51 - 150
Isopropylbenzene	25.0	25.3		ug/L		101	77 - 122
Methyl acetate	50.0	44.3		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	23.7		ug/L		95	77 - 120
Methylcyclohexane	25.0	28.4		ug/L		114	68 - 134
Methylene Chloride	25.0	24.7		ug/L		99	75 - 124
m-Xylene & p-Xylene	25.0	25.1		ug/L		100	76 - 122
Naphthalene	25.0	23.8		ug/L		95	66 - 125
n-Butylbenzene	25.0	25.7		ug/L		103	71 - 128
N-Propylbenzene	25.0	24.9		ug/L		100	75 - 127
o-Chlorotoluene	25.0	24.8		ug/L		99	76 - 121
o-Xylene	25.0	24.5		ug/L		98	76 - 122
p-Chlorotoluene	25.0	24.9		ug/L		100	77 - 121
p-Cymene	25.0	25.8		ug/L		103	73 - 120
sec-Butylbenzene	25.0	25.7		ug/L		103	74 - 127
Styrene	25.0	24.8		ug/L		99	80 - 120
tert-Butylbenzene	25.0	25.6		ug/L		102	75 - 123
Tetrachloroethene	25.0	26.1		ug/L		104	74 - 122
Tetrahydrofuran	50.0	46.2		ug/L		92	62 - 132
Toluene	25.0	24.7		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	73 - 127
trans-1,3-Dichloropropene	25.0	24.9		ug/L		100	80 - 120
trans-1,4-Dichloro-2-butene	25.0	23.9		ug/L		95	41 - 131
Trichloroethene	25.0	24.7		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	24.5		ug/L		98	62 - 150
Vinyl acetate	50.0	50.4		ug/L		101	50 - 144
Vinyl chloride	25.0	24.4		ug/L		98	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-165573-F-1 MS
Matrix: Water
Analysis Batch: 515292

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		10000	9700		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	ND		10000	9240		ug/L		92	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10000	11100		ug/L		111	61 - 148
1,1,2-Trichloroethane	ND		10000	9260		ug/L		93	76 - 122
1,1-Dichloroethane	ND		10000	9480		ug/L		95	77 - 120
1,1-Dichloroethene	ND		10000	9970		ug/L		100	66 - 127
1,2,4-Trichlorobenzene	ND		10000	9280		ug/L		93	79 - 122
1,2-Dibromo-3-Chloropropane	ND		10000	9070		ug/L		91	56 - 134
1,2-Dibromoethane (EDB)	ND		10000	9360		ug/L		94	77 - 120
1,2-Dichlorobenzene	ND		10000	9300		ug/L		93	80 - 124
1,2-Dichloroethane	ND		10000	8790		ug/L		88	75 - 120
1,2-Dichloroethene, Total	ND		20000	19300		ug/L		96	72 - 124
1,2-Dichloropropane	ND		10000	9320		ug/L		93	76 - 120
1,3-Dichlorobenzene	ND		10000	9370		ug/L		94	77 - 120
1,4-Dichlorobenzene	ND		10000	9220		ug/L		92	78 - 124
2-Butanone (MEK)	ND		50000	40700		ug/L		81	57 - 140
2-Hexanone	ND		50000	44900		ug/L		90	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		50000	44600		ug/L		89	71 - 125
Acetone	ND		50000	38400		ug/L		77	56 - 142
Benzene	ND		10000	9490		ug/L		95	71 - 124
Bromodichloromethane	ND		10000	9130		ug/L		91	80 - 122
Bromoform	ND		10000	9190		ug/L		92	61 - 132
Bromomethane	ND		10000	10300		ug/L		103	55 - 144
Carbon disulfide	ND		10000	9530		ug/L		95	59 - 134
Carbon tetrachloride	ND		10000	9950		ug/L		100	72 - 134
Chlorobenzene	ND		10000	9550		ug/L		95	80 - 120
Chloroethane	ND		10000	9470		ug/L		95	69 - 136
Chloroform	ND		10000	8960		ug/L		90	73 - 127
Chloromethane	ND		10000	9320		ug/L		93	68 - 124
cis-1,2-Dichloroethene	ND		10000	9500		ug/L		95	74 - 124
cis-1,3-Dichloropropene	ND		10000	9070		ug/L		91	74 - 124
Cyclohexane	ND		10000	10400		ug/L		104	59 - 135
Dibromochloromethane	ND		10000	9240		ug/L		92	75 - 125
Dichlorodifluoromethane	ND		10000	10700		ug/L		107	59 - 135
Ethylbenzene	ND		10000	9530		ug/L		95	77 - 123
Isopropylbenzene	ND		10000	9640		ug/L		96	77 - 122
Methyl acetate	ND		20000	16900		ug/L		85	74 - 133
Methyl tert-butyl ether	ND		10000	9100		ug/L		91	77 - 120
Methylcyclohexane	ND		10000	10900		ug/L		109	68 - 134
Methylene Chloride	ND		10000	9660		ug/L		97	75 - 124
m-Xylene & p-Xylene	ND		10000	9490		ug/L		95	76 - 122
o-Xylene	ND		10000	9420		ug/L		94	76 - 122
Styrene	ND		10000	9450		ug/L		95	80 - 120
Tetrachloroethene	ND		10000	9900		ug/L		99	74 - 122
Toluene	ND		10000	9550		ug/L		96	80 - 122
trans-1,2-Dichloroethene	ND		10000	9770		ug/L		98	73 - 127
trans-1,3-Dichloropropene	ND		10000	9220		ug/L		92	80 - 120
Trichloroethene	ND		10000	9510		ug/L		95	74 - 123

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-165573-F-1 MS
Matrix: Water
Analysis Batch: 515292

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	ND		10000	10700		ug/L		107	62 - 150
Vinyl chloride	ND		10000	10600		ug/L		106	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 480-165573-F-1 MSD
Matrix: Water
Analysis Batch: 515292

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		10000	9720		ug/L		97	73 - 126	0	15
1,1,2,2-Tetrachloroethane	ND		10000	9340		ug/L		93	76 - 120	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10000	11100		ug/L		111	61 - 148	0	20
1,1,2-Trichloroethane	ND		10000	9470		ug/L		95	76 - 122	2	15
1,1-Dichloroethane	ND		10000	9370		ug/L		94	77 - 120	1	20
1,1-Dichloroethene	ND		10000	9910		ug/L		99	66 - 127	1	16
1,2,4-Trichlorobenzene	ND		10000	9650		ug/L		97	79 - 122	4	20
1,2-Dibromo-3-Chloropropane	ND		10000	9390		ug/L		94	56 - 134	3	15
1,2-Dibromoethane (EDB)	ND		10000	9390		ug/L		94	77 - 120	0	15
1,2-Dichlorobenzene	ND		10000	9480		ug/L		95	80 - 124	2	20
1,2-Dichloroethane	ND		10000	8660		ug/L		87	75 - 120	1	20
1,2-Dichloroethene, Total	ND		20000	19200		ug/L		96	72 - 124	0	20
1,2-Dichloropropane	ND		10000	9330		ug/L		93	76 - 120	0	20
1,3-Dichlorobenzene	ND		10000	9380		ug/L		94	77 - 120	0	20
1,4-Dichlorobenzene	ND		10000	9240		ug/L		92	78 - 124	0	20
2-Butanone (MEK)	ND		50000	41300		ug/L		83	57 - 140	2	20
2-Hexanone	ND		50000	45700		ug/L		91	65 - 127	2	15
4-Methyl-2-pentanone (MIBK)	ND		50000	45000		ug/L		90	71 - 125	1	35
Acetone	ND		50000	40100		ug/L		80	56 - 142	4	15
Benzene	ND		10000	9550		ug/L		95	71 - 124	1	13
Bromodichloromethane	ND		10000	9080		ug/L		91	80 - 122	0	15
Bromoform	ND		10000	9310		ug/L		93	61 - 132	1	15
Bromomethane	ND		10000	9730		ug/L		97	55 - 144	6	15
Carbon disulfide	ND		10000	9710		ug/L		97	59 - 134	2	15
Carbon tetrachloride	ND		10000	9860		ug/L		99	72 - 134	1	15
Chlorobenzene	ND		10000	9530		ug/L		95	80 - 120	0	25
Chloroethane	ND		10000	9300		ug/L		93	69 - 136	2	15
Chloroform	ND		10000	8990		ug/L		90	73 - 127	0	20
Chloromethane	ND		10000	9250		ug/L		92	68 - 124	1	15
cis-1,2-Dichloroethene	ND		10000	9520		ug/L		95	74 - 124	0	15
cis-1,3-Dichloropropene	ND		10000	9050		ug/L		90	74 - 124	0	15
Cyclohexane	ND		10000	10400		ug/L		104	59 - 135	1	20
Dibromochloromethane	ND		10000	9350		ug/L		94	75 - 125	1	15
Dichlorodifluoromethane	ND		10000	10700		ug/L		107	59 - 135	0	20
Ethylbenzene	ND		10000	9420		ug/L		94	77 - 123	1	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-165573-F-1 MSD
Matrix: Water
Analysis Batch: 515292

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene	ND		10000	9710		ug/L		97	77 - 122	1	20
Methyl acetate	ND		20000	17000		ug/L		85	74 - 133	1	20
Methyl tert-butyl ether	ND		10000	9350		ug/L		93	77 - 120	3	37
Methylcyclohexane	ND		10000	10900		ug/L		109	68 - 134	0	20
Methylene Chloride	ND		10000	9660		ug/L		97	75 - 124	0	15
m-Xylene & p-Xylene	ND		10000	9430		ug/L		94	76 - 122	1	16
o-Xylene	ND		10000	9510		ug/L		95	76 - 122	1	16
Styrene	ND		10000	9410		ug/L		94	80 - 120	0	20
Tetrachloroethene	ND		10000	9910		ug/L		99	74 - 122	0	20
Toluene	ND		10000	9580		ug/L		96	80 - 122	0	15
trans-1,2-Dichloroethene	ND		10000	9710		ug/L		97	73 - 127	1	20
trans-1,3-Dichloropropene	ND		10000	9280		ug/L		93	80 - 120	1	15
Trichloroethene	ND		10000	9540		ug/L		95	74 - 123	0	16
Trichlorofluoromethane	ND		10000	10600		ug/L		106	62 - 150	1	20
Vinyl chloride	ND		10000	10600		ug/L		106	65 - 133	0	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-515649/9
Matrix: Water
Analysis Batch: 515649

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.020		ug/L			01/30/20 22:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*131*		*50 - 150*		*01/30/20 22:07*	*1*
TBA-d9 (Surr)	*120*		*50 - 150*		*01/30/20 22:07*	*1*

Lab Sample ID: LCS 480-515649/6
Matrix: Water
Analysis Batch: 515649

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			0.200	0.241		ug/L		120	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*118*		*50 - 150*
TBA-d9 (Surr)	*114*		*50 - 150*

Method: 8260C SIM - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-515649/7
Matrix: Water
Analysis Batch: 515649

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			0.200	0.242		ug/L		121	50 - 150	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*117*		*50 - 150*
TBA-d9 (Surr)	*143*		*50 - 150*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 280-484088/1-A
Matrix: Water
Analysis Batch: 484430

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 484088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		1.0		ug/L		01/28/20 09:00	01/29/20 23:17	1

Lab Sample ID: LCS 280-484088/2-A
Matrix: Water
Analysis Batch: 484430

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 484088

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese			40.0	37.9		ug/L		95	85 - 117		

Lab Sample ID: MB 280-484105/1-A
Matrix: Water
Analysis Batch: 484430

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 484105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		1.0		ug/L		01/28/20 16:20	01/30/20 00:33	1

Lab Sample ID: LCS 280-484105/2-A
Matrix: Water
Analysis Batch: 484430

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 484105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese			40.0	39.6		ug/L		99	85 - 117		

Lab Sample ID: 280-133169-3 MS
Matrix: Water
Analysis Batch: 484430

Client Sample ID: SW1-012220
Prep Type: Dissolved
Prep Batch: 484088

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese	ND		40.0	38.0		ug/L		94	85 - 117		

Lab Sample ID: 280-133169-3 MSD
Matrix: Water
Analysis Batch: 484430

Client Sample ID: SW1-012220
Prep Type: Dissolved
Prep Batch: 484088

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	ND		40.0	39.3		ug/L		97	85 - 117	3	20

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

Lab Sample ID: 280-133169-1 MS
Matrix: Water
Analysis Batch: 484430

Client Sample ID: MW7-012220
Prep Type: Dissolved
Prep Batch: 484105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	ND		40.0	41.0		ug/L		103	85 - 117

Lab Sample ID: 280-133169-1 MSD
Matrix: Water
Analysis Batch: 484430

Client Sample ID: MW7-012220
Prep Type: Dissolved
Prep Batch: 484105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	ND		40.0	39.6		ug/L		99	85 - 117	4	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-484081/13
Matrix: Water
Analysis Batch: 484081

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/L			01/27/20 15:43	1
Sulfate	ND		5.0		mg/L			01/27/20 15:43	1

Lab Sample ID: LCS 280-484081/11
Matrix: Water
Analysis Batch: 484081

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	100	98.2		mg/L		98	90 - 110
Sulfate	100	93.9		mg/L		94	90 - 110

Lab Sample ID: LCSD 280-484081/12
Matrix: Water
Analysis Batch: 484081

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	100	98.4		mg/L		98	90 - 110	0	10
Sulfate	100	94.0		mg/L		94	90 - 110	0	10

Lab Sample ID: MRL 280-484081/10
Matrix: Water
Analysis Batch: 484081

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	3.93		mg/L		79	50 - 150
Sulfate	5.00	ND		mg/L		83	50 - 150

Lab Sample ID: 280-133169-6 MS
Matrix: Water
Analysis Batch: 484081

Client Sample ID: SW6-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.3		50.0	56.5		mg/L		106	80 - 120
Sulfate	ND		50.0	53.9		mg/L		99	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-133169-6 MSD
Matrix: Water
Analysis Batch: 484081

Client Sample ID: SW6-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.3		50.0	57.0		mg/L		107	80 - 120	1	20
Sulfate	ND		50.0	54.4		mg/L		100	80 - 120	1	20

Lab Sample ID: 280-133169-6 DU
Matrix: Water
Analysis Batch: 484081

Client Sample ID: SW6-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	3.3		3.32		mg/L		0.1	15
Sulfate	ND		ND		mg/L		NC	15

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-484557/57
Matrix: Water
Analysis Batch: 484557

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			01/30/20 13:39	1

Lab Sample ID: LCS 280-484557/56
Matrix: Water
Analysis Batch: 484557

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.50		mg/L		100	90 - 110

Lab Sample ID: 280-133169-9 MS
Matrix: Water
Analysis Batch: 484557

Client Sample ID: MW6-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.030		1.00	0.958		mg/L		93	90 - 110

Lab Sample ID: 280-133169-9 MSD
Matrix: Water
Analysis Batch: 484557

Client Sample ID: MW6-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.030		1.00	0.959		mg/L		93	90 - 110	0	10

Lab Sample ID: MB 280-484652/19
Matrix: Water
Analysis Batch: 484652

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	ND		0.030		mg/L			01/31/20 13:32	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-484652/18
Matrix: Water
Analysis Batch: 484652

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.55		mg/L		102	90 - 110

Lab Sample ID: LCS 280-484652/71
Matrix: Water
Analysis Batch: 484652

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	2.50	2.43		mg/L		97	90 - 110

Lab Sample ID: LCSD 280-484652/72
Matrix: Water
Analysis Batch: 484652

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	2.50	2.56		mg/L		102	90 - 110	5	10

Lab Sample ID: 280-133169-2 MS
Matrix: Water
Analysis Batch: 484652

Client Sample ID: MW5-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	ND		1.00	1.01		mg/L		101	90 - 110

Lab Sample ID: 280-133169-2 MSD
Matrix: Water
Analysis Batch: 484652

Client Sample ID: MW5-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	ND		1.00	1.02		mg/L		102	90 - 110	2	10

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-484292/5
Matrix: Water
Analysis Batch: 484292

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		10		mg/L			01/28/20 16:32	1
Bicarbonate Alkalinity	ND		10		mg/L			01/28/20 16:32	1
Carbonate Alkalinity	ND		10		mg/L			01/28/20 16:32	1

Lab Sample ID: LCS 280-484292/4
Matrix: Water
Analysis Batch: 484292

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity	200	217		mg/L		108	89 - 109

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-132928-A-2 DU
Matrix: Water
Analysis Batch: 484292

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	90		91.7		mg/L		2	10

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 280-484196/36
Matrix: Water
Analysis Batch: 484196

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Average	ND		1.0		mg/L			01/28/20 04:18	1

Lab Sample ID: LCS 280-484196/35
Matrix: Water
Analysis Batch: 484196

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	25.0	23.9		mg/L		95	88 - 112

Lab Sample ID: 280-133169-1 MS
Matrix: Water
Analysis Batch: 484196

Client Sample ID: MW7-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	1.7		25.0	25.5		mg/L		95	88 - 112

Lab Sample ID: 280-133169-1 MSD
Matrix: Water
Analysis Batch: 484196

Client Sample ID: MW7-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.7		25.0	25.8		mg/L		96	88 - 112	1	15

Lab Sample ID: 280-133169-11 MS
Matrix: Water
Analysis Batch: 484196

Client Sample ID: MW20DD-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Average	1.6		25.0	25.9		mg/L		97	88 - 112

Lab Sample ID: 280-133169-11 MSD
Matrix: Water
Analysis Batch: 484196

Client Sample ID: MW20DD-012220
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Average	1.6		25.0	25.7		mg/L		97	88 - 112	0	15

GC/MS VOA

Analysis Batch: 515292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Total/NA	Water	8260C	
280-133169-2	MW5-012220	Total/NA	Water	8260C	
280-133169-3	SW1-012220	Total/NA	Water	8260C	
280-133169-4	MW12I-012220	Total/NA	Water	8260C	
280-133169-5	SW4-012220	Total/NA	Water	8260C	
280-133169-6	SW6-012220	Total/NA	Water	8260C	
280-133169-7	MW13D-012220	Total/NA	Water	8260C	
280-133169-8	SW7-012220	Total/NA	Water	8260C	
280-133169-9	MW6-012220	Total/NA	Water	8260C	
280-133169-10	MW14-012220	Total/NA	Water	8260C	
280-133169-11	MW20DD-012220	Total/NA	Water	8260C	
280-133169-12	TB1	Total/NA	Water	8260C	
MB 480-515292/6	Method Blank	Total/NA	Water	8260C	
LCS 480-515292/4	Lab Control Sample	Total/NA	Water	8260C	
480-165573-F-1 MS	Matrix Spike	Total/NA	Water	8260C	
480-165573-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

Analysis Batch: 515649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Total/NA	Water	8260C SIM	
280-133169-2	MW5-012220	Total/NA	Water	8260C SIM	
280-133169-3	SW1-012220	Total/NA	Water	8260C SIM	
280-133169-4	MW12I-012220	Total/NA	Water	8260C SIM	
280-133169-5	SW4-012220	Total/NA	Water	8260C SIM	
280-133169-6	SW6-012220	Total/NA	Water	8260C SIM	
280-133169-7	MW13D-012220	Total/NA	Water	8260C SIM	
280-133169-8	SW7-012220	Total/NA	Water	8260C SIM	
280-133169-9	MW6-012220	Total/NA	Water	8260C SIM	
280-133169-10	MW14-012220	Total/NA	Water	8260C SIM	
280-133169-11	MW20DD-012220	Total/NA	Water	8260C SIM	
280-133169-12	TB1	Total/NA	Water	8260C SIM	
MB 480-515649/9	Method Blank	Total/NA	Water	8260C SIM	
LCS 480-515649/6	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 480-515649/7	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Metals

Prep Batch: 484088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-3	SW1-012220	Dissolved	Water	3005A	
280-133169-4	MW12I-012220	Dissolved	Water	3005A	
280-133169-5	SW4-012220	Dissolved	Water	3005A	
280-133169-6	SW6-012220	Dissolved	Water	3005A	
280-133169-7	MW13D-012220	Dissolved	Water	3005A	
280-133169-8	SW7-012220	Dissolved	Water	3005A	
280-133169-9	MW6-012220	Dissolved	Water	3005A	
280-133169-10	MW14-012220	Dissolved	Water	3005A	
280-133169-11	MW20DD-012220	Dissolved	Water	3005A	
MB 280-484088/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-484088/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-133169-3 MS	SW1-012220	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 484088 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-3 MSD	SW1-012220	Dissolved	Water	3005A	

Prep Batch: 484105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Dissolved	Water	3005A	
280-133169-2	MW5-012220	Dissolved	Water	3005A	
MB 280-484105/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 280-484105/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
280-133169-1 MS	MW7-012220	Dissolved	Water	3005A	
280-133169-1 MSD	MW7-012220	Dissolved	Water	3005A	

Analysis Batch: 484430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Dissolved	Water	6020	484105
280-133169-2	MW5-012220	Dissolved	Water	6020	484105
280-133169-3	SW1-012220	Dissolved	Water	6020	484088
280-133169-4	MW12I-012220	Dissolved	Water	6020	484088
280-133169-5	SW4-012220	Dissolved	Water	6020	484088
280-133169-6	SW6-012220	Dissolved	Water	6020	484088
280-133169-7	MW13D-012220	Dissolved	Water	6020	484088
280-133169-8	SW7-012220	Dissolved	Water	6020	484088
280-133169-9	MW6-012220	Dissolved	Water	6020	484088
280-133169-10	MW14-012220	Dissolved	Water	6020	484088
280-133169-11	MW20DD-012220	Dissolved	Water	6020	484088
MB 280-484088/1-A	Method Blank	Total Recoverable	Water	6020	484088
MB 280-484105/1-A	Method Blank	Total Recoverable	Water	6020	484105
LCS 280-484088/2-A	Lab Control Sample	Total Recoverable	Water	6020	484088
LCS 280-484105/2-A	Lab Control Sample	Total Recoverable	Water	6020	484105
280-133169-1 MS	MW7-012220	Dissolved	Water	6020	484105
280-133169-1 MSD	MW7-012220	Dissolved	Water	6020	484105
280-133169-3 MS	SW1-012220	Dissolved	Water	6020	484088
280-133169-3 MSD	SW1-012220	Dissolved	Water	6020	484088

General Chemistry

Analysis Batch: 484081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Total/NA	Water	300.0	
280-133169-2	MW5-012220	Total/NA	Water	300.0	
280-133169-3	SW1-012220	Total/NA	Water	300.0	
280-133169-4	MW12I-012220	Total/NA	Water	300.0	
280-133169-5	SW4-012220	Total/NA	Water	300.0	
280-133169-6	SW6-012220	Total/NA	Water	300.0	
280-133169-7	MW13D-012220	Total/NA	Water	300.0	
280-133169-8	SW7-012220	Total/NA	Water	300.0	
280-133169-9	MW6-012220	Total/NA	Water	300.0	
280-133169-10	MW14-012220	Total/NA	Water	300.0	
280-133169-11	MW20DD-012220	Total/NA	Water	300.0	
MB 280-484081/13	Method Blank	Total/NA	Water	300.0	
LCS 280-484081/11	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-484081/12	Lab Control Sample Dup	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 484081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 280-484081/10	Lab Control Sample	Total/NA	Water	300.0	
280-133169-6 MS	SW6-012220	Total/NA	Water	300.0	
280-133169-6 MSD	SW6-012220	Total/NA	Water	300.0	
280-133169-6 DU	SW6-012220	Total/NA	Water	300.0	

Analysis Batch: 484196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Total/NA	Water	SM 5310B	
280-133169-2	MW5-012220	Total/NA	Water	SM 5310B	
280-133169-3	SW1-012220	Total/NA	Water	SM 5310B	
280-133169-4	MW12I-012220	Total/NA	Water	SM 5310B	
280-133169-5	SW4-012220	Total/NA	Water	SM 5310B	
280-133169-6	SW6-012220	Total/NA	Water	SM 5310B	
280-133169-7	MW13D-012220	Total/NA	Water	SM 5310B	
280-133169-8	SW7-012220	Total/NA	Water	SM 5310B	
280-133169-9	MW6-012220	Total/NA	Water	SM 5310B	
280-133169-10	MW14-012220	Total/NA	Water	SM 5310B	
280-133169-11	MW20DD-012220	Total/NA	Water	SM 5310B	
MB 280-484196/36	Method Blank	Total/NA	Water	SM 5310B	
LCS 280-484196/35	Lab Control Sample	Total/NA	Water	SM 5310B	
280-133169-1 MS	MW7-012220	Total/NA	Water	SM 5310B	
280-133169-1 MSD	MW7-012220	Total/NA	Water	SM 5310B	
280-133169-11 MS	MW20DD-012220	Total/NA	Water	SM 5310B	
280-133169-11 MSD	MW20DD-012220	Total/NA	Water	SM 5310B	

Analysis Batch: 484292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Total/NA	Water	SM 2320B	
280-133169-2	MW5-012220	Total/NA	Water	SM 2320B	
280-133169-3	SW1-012220	Total/NA	Water	SM 2320B	
280-133169-4	MW12I-012220	Total/NA	Water	SM 2320B	
280-133169-5	SW4-012220	Total/NA	Water	SM 2320B	
280-133169-6	SW6-012220	Total/NA	Water	SM 2320B	
280-133169-7	MW13D-012220	Total/NA	Water	SM 2320B	
280-133169-8	SW7-012220	Total/NA	Water	SM 2320B	
280-133169-9	MW6-012220	Total/NA	Water	SM 2320B	
280-133169-10	MW14-012220	Total/NA	Water	SM 2320B	
280-133169-11	MW20DD-012220	Total/NA	Water	SM 2320B	
MB 280-484292/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-484292/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-132928-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 484557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-1	MW7-012220	Total/NA	Water	350.1	
280-133169-3	SW1-012220	Total/NA	Water	350.1	
280-133169-4	MW12I-012220	Total/NA	Water	350.1	
280-133169-5	SW4-012220	Total/NA	Water	350.1	
280-133169-6	SW6-012220	Total/NA	Water	350.1	
280-133169-7	MW13D-012220	Total/NA	Water	350.1	
280-133169-8	SW7-012220	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 484557 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-9	MW6-012220	Total/NA	Water	350.1	
280-133169-10	MW14-012220	Total/NA	Water	350.1	
280-133169-11	MW20DD-012220	Total/NA	Water	350.1	
MB 280-484557/57	Method Blank	Total/NA	Water	350.1	
LCS 280-484557/56	Lab Control Sample	Total/NA	Water	350.1	
280-133169-9 MS	MW6-012220	Total/NA	Water	350.1	
280-133169-9 MSD	MW6-012220	Total/NA	Water	350.1	

Analysis Batch: 484652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-133169-2	MW5-012220	Total/NA	Water	350.1	
MB 280-484652/19	Method Blank	Total/NA	Water	350.1	
LCS 280-484652/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-484652/71	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-484652/72	Lab Control Sample Dup	Total/NA	Water	350.1	
280-133169-2 MS	MW5-012220	Total/NA	Water	350.1	
280-133169-2 MSD	MW5-012220	Total/NA	Water	350.1	

Lab Chronicle

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Client Sample ID: MW7-012220
Date Collected: 01/22/20 08:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/28/20 23:53	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/30/20 22:46	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484105	01/28/20 16:20	EC	TAL DEN
Dissolved	Analysis	6020		1			484430	01/30/20 00:40	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 19:28	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:01	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 17:18	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 04:54	SGB	TAL DEN

Client Sample ID: MW5-012220
Date Collected: 01/22/20 10:45
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 00:15	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/30/20 23:10	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484105	01/28/20 16:20	EC	TAL DEN
Dissolved	Analysis	6020		1			484430	01/30/20 00:58	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 19:45	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484652	01/31/20 14:50	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 17:23	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 06:14	SGB	TAL DEN

Client Sample ID: SW1-012220
Date Collected: 01/22/20 11:55
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 00:39	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/30/20 23:36	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/29/20 23:25	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 20:01	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:05	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 17:28	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 06:34	SGB	TAL DEN

Client Sample ID: MW12I-012220
Date Collected: 01/22/20 12:15
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 01:02	OMI	TAL BUF

Lab Chronicle

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Client Sample ID: MW12I-012220

Lab Sample ID: 280-133169-4

Date Collected: 01/22/20 12:15

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 00:00	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/29/20 23:43	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 20:18	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:07	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 17:32	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 06:51	SGB	TAL DEN

Client Sample ID: SW4-012220

Lab Sample ID: 280-133169-5

Date Collected: 01/22/20 13:05

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 01:25	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 00:25	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/29/20 23:46	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 20:34	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:09	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 17:38	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 07:07	SGB	TAL DEN

Client Sample ID: SW6-012220

Lab Sample ID: 280-133169-6

Date Collected: 01/22/20 13:40

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 01:48	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 00:49	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/29/20 23:57	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 20:50	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:11	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 17:54	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 07:24	SGB	TAL DEN

Client Sample ID: MW13D-012220

Lab Sample ID: 280-133169-7

Date Collected: 01/22/20 13:40

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 02:11	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 01:13	LCH	TAL BUF

Client Sample ID: MW13D-012220

Lab Sample ID: 280-133169-7

Date Collected: 01/22/20 13:40

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/30/20 00:00	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 22:29	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:13	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 17:59	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 07:39	SGB	TAL DEN

Client Sample ID: SW7-012220

Lab Sample ID: 280-133169-8

Date Collected: 01/22/20 15:00

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 02:33	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 01:38	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/30/20 00:04	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 22:45	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:15	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 18:04	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 07:55	SGB	TAL DEN

Client Sample ID: MW6-012220

Lab Sample ID: 280-133169-9

Date Collected: 01/22/20 16:30

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 02:57	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 02:02	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/30/20 00:08	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 23:02	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:17	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 18:09	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 08:10	SGB	TAL DEN

Client Sample ID: MW14-012220

Lab Sample ID: 280-133169-10

Date Collected: 01/22/20 16:40

Matrix: Water

Date Received: 01/24/20 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 03:20	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 02:26	LCH	TAL BUF

Lab Chronicle

Client: Aspect Consulting
Project/Site: Hansville Landfill

Job ID: 280-133169-1

Client Sample ID: MW14-012220

Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/30/20 00:11	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 23:18	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:35	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 18:14	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 08:27	SGB	TAL DEN

Client Sample ID: MW20DD-012220

Date Collected: 01/22/20 00:00
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 03:43	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 02:51	LCH	TAL BUF
Dissolved	Prep	3005A			50 mL	50 mL	484088	01/28/20 09:00	AL	TAL DEN
Dissolved	Analysis	6020		1			484430	01/30/20 00:15	LMT	TAL DEN
Total/NA	Analysis	300.0		1	5 mL	5 mL	484081	01/27/20 23:34	JAP	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	484557	01/30/20 14:37	BWH	TAL DEN
Total/NA	Analysis	SM 2320B		1			484292	01/28/20 18:19	SPG	TAL DEN
Total/NA	Analysis	SM 5310B		1	20 mL	20 mL	484196	01/28/20 09:18	SGB	TAL DEN

Client Sample ID: TB1

Date Collected: 01/22/20 16:40
Date Received: 01/24/20 09:20

Lab Sample ID: 280-133169-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	515292	01/29/20 04:05	OMI	TAL BUF
Total/NA	Analysis	8260C SIM		1	25 mL	25 mL	515649	01/31/20 03:16	LCH	TAL BUF

Laboratory References:

SC0056 = Analytical Resources, Inc, 4611 South 134th Place, Suite 100, Tukwila, WA 98168, TEL (206)695-6200
TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Analytical Resources, Incorporated
Analytical Chemists and Consultants

13 February 2020

Betsy Sara
Test America - Denver
4955 Yarrow Street
Arvada, CO 80002

RE: Hansville

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
20A0285	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, Inc.

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006

PJLA Testing
Accreditation # 66169

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TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

20A0285

Chain of Custody Record

Denver #280

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information

Client Contact: Meiloni Lanier-Kamaha'o
Company: Aspect Consulting, LLC
Address: 350 Madison Ave N
City: Bainbridge Island
State, Zip: WA, 98110
Phone:
Email: mlkamahao@aspectconsulting.com
Project Name: Hansville Landfill
Site: Washington

Sampler: David Unruh / Dylan Bronsum
Phone: (206) 413-5408
Due Date Requested:
TAT Requested (days):
PO #: Purchase Order not required
WO #:
Project #:skip sites/events 28006013 - 1Q Sampling
SSOW#:

Lab PM: Sara, Betsy A
E-Mail: betsy.sara@testamericainc.com

Carrier Tracking No(s):

COC No: 280-23414-6845.1
Page: 1/1
Job #:

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
Other:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C SIM - Vinyl Chloride (TA Buffalo)	Dissolved Metals	Ammonia/TOC	Alks/Cl/SO4	Ortho-phosphate (field filtered) - Direct sub to ARI	Dissolved Arsenice (Direct sub to ARI)	8260C - Full Scan VOA (TA Buffalo)	Nitrate/Nitrite (IC) - Direct sub to ARI	Total Number of containers	Special Instructions/Note:
				Preservation Code:			A	D	S	N	N	D	A	N		
MW-7-012220	1/22/20	0845		W							X	X		X		
MW-5-012220		1045														
SW-1-012220		1155														Diss As,NO3,NO2,o-phos subbed direct to ARI
MW-12I-012220		1215														
SW-4-012220		1305														
SW-6-012220		1340														
MW-12D-012220		1340														
SW-7-012220		1500														
MW-6-012220		1630														
MW-14-012220		1640														
MW-200D-012220		—														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ______ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
David Unruh	1/23/20 0902	Aspect	Jacobina Hefzehler	01/23/2020 0902	ARI
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Analytical Report

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-7-012220	20A0285-01	Water	22-Jan-2020 08:45	23-Jan-2020 09:02
MW-5-012220	20A0285-02	Water	22-Jan-2020 10:45	23-Jan-2020 09:02
SW-1-012220	20A0285-03	Water	22-Jan-2020 11:55	23-Jan-2020 09:02
MW-12I-012220	20A0285-04	Water	22-Jan-2020 12:15	23-Jan-2020 09:02
SW-4-012220	20A0285-05	Water	22-Jan-2020 13:05	23-Jan-2020 09:02
SW-6-012220	20A0285-06	Water	22-Jan-2020 13:40	23-Jan-2020 09:02
MW-12D-012220	20A0285-07	Water	22-Jan-2020 13:40	23-Jan-2020 09:02
SW-7-012220	20A0285-08	Water	22-Jan-2020 15:00	23-Jan-2020 09:02
MW-6-012220	20A0285-09	Water	22-Jan-2020 16:30	23-Jan-2020 09:02
MW-14-012220	20A0285-10	Water	22-Jan-2020 16:40	23-Jan-2020 09:02
MW-20DD-012220	20A0285-11	Water	22-Jan-2020 00:00	23-Jan-2020 09:02

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

Work Order Case Narrative

Sample receipt

Samples as listed on the preceding page were received January 23, 2020 under ARI work order 20A0285. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Dissolved Arsenic - EPA Method 200.8

The samples were digested and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank was clean at the reporting limits.

The LCS percent recoveries were within control limits.

A matrix spike and duplicate were prepared in conjunction with sample MW-7-012220. The matrix spike percent recovery and duplicate RPD were within QC limits.

Anions - EPA Method 300.0

The initial O-Phos analysis was analyzed within holding, but due to an analyst oversight the samples were analyzed on a non-O-phos calibrated instrument, the samples were reanalyzed outside of the 48 hour recommended holding time on a properly calibrated instrument. The reanalysis has been flagged with "H" qualifiers.

Initial and continuing calibrations were within method requirements.

The method blanks were clean at the reporting limits.

The LCS percent recoveries were within control limits.

Matrix spikes and duplicates were prepared in conjunction with sample MW-7-012220. The matrix spike percent recoveries and duplicate RPD were within QC limits.

WORK ORDER

20A0285

Client: Test America - Denver | **Project Manager:** Amanda Volgardsen

Project: Hansville | **Project Number:** [none]

Preservation Confirmation

Container ID	Container Type	pH	
20A0285-01 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-01 B	Miscellaneous Container		
20A0285-01 C	Miscellaneous Container		
20A0285-02 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-02 B	Miscellaneous Container		
20A0285-02 C	Miscellaneous Container		
20A0285-03 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-03 B	Miscellaneous Container		
20A0285-03 C	Miscellaneous Container		
20A0285-04 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-04 B	Miscellaneous Container		
20A0285-04 C	Miscellaneous Container		
20A0285-05 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-05 B	Miscellaneous Container		
20A0285-05 C	Miscellaneous Container		
20A0285-06 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-06 B	Miscellaneous Container		
20A0285-06 C	Miscellaneous Container		
20A0285-07 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-07 B	Miscellaneous Container		
20A0285-07 C	Miscellaneous Container		
20A0285-08 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-08 B	Miscellaneous Container		
20A0285-08 C	Miscellaneous Container		
20A0285-09 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-09 B	Miscellaneous Container		
20A0285-09 C	Miscellaneous Container		
20A0285-10 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-10 B	Miscellaneous Container		
20A0285-10 C	Miscellaneous Container		
20A0285-11 A	Miscellaneous container, 1:1 HN03 (FF)	<2	Pass
20A0285-11 B	Miscellaneous Container		
20A0285-11 C	Miscellaneous Container		

Reviewed By

Date

WORK ORDER

20A0285

Client: Test America - Denver	**Project Manager: Amanda Volgardsen**
Project: Hansville	**Project Number: [none]**

JB~
Preservation Confirmed By

01/23/2020
Date

Reviewed By

Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Test America

Project Name: Hansville Landfill

COC No(s): NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 204028S

Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 0902 0.2°C

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: DOO 5206

Cooler Accepted by: JBw Date: 01/23/2020 Time: 0902

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
How were bottles sealed in plastic bags?	Individually	Grouped	Not
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JBw Date: 01/23/2020 Time: 0928 Labels checked by: JBw

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-7-012220

20A0285-01 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 08:45

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 16:09

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-01 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00121**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-7-012220

20A0285-01 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 08:45

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 12:29

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-01 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	**0.260**	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-7-012220

20A0285-01RE2 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 08:45

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 16:17

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-01RE2 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-5-012220

20A0285-02 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 10:45

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 15:44

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-02 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00183**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-5-012220

20A0285-02 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 10:45

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 13:31

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-02 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	**2.37**	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-5-012220

20A0285-02RE2 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 10:45

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 17:17

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-02RE2 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-1-012220

20A0285-03 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 11:55

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 15:48

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-03 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00156**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-1-012220

20A0285-03 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 11:55

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 13:52

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-03 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	**2.12**	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-1-012220

20A0285-03RE2 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 11:55

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 17:37

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-03RE2 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-12I-012220

20A0285-04 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 12:15

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 15:52

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-04 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00243**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-12I-012220

20A0285-04 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 12:15

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 14:14

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-04 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-12I-012220

20A0285-04RE2 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 12:15

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 17:57

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-04RE2 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-4-012220

20A0285-05 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 13:05

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 15:56

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-05 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00192**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-4-012220

20A0285-05 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 13:05

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 14:35

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-05 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	**1.20**	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-4-012220

20A0285-05RE2 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 13:05

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 18:17

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-05RE2 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-6-012220

20A0285-06 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 13:40

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 16:00

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-06 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00212**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-6-012220

20A0285-06 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 13:40

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 16:01

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-06 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	**1.04**	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-6-012220

20A0285-06RE1 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 13:40

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 19:17

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-06RE1 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-12D-012220

20A0285-07 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 13:40

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 16:04

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-07 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00486**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-12D-012220

20A0285-07 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 13:40

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 16:22

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-07 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-12D-012220

20A0285-07RE1 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 13:40

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 19:37

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-07RE1 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-7-012220

20A0285-08 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 15:00

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 16:47

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-08 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00103**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-7-012220

20A0285-08 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 15:00

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 16:44

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-08 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

SW-7-012220

20A0285-08RE1 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 15:00

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/24/2020 02:59

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-08RE1 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	2	0.200	0.200	**3.70**	mg/L	D

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 19:57

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-08RE1 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-6-012220

20A0285-09 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 16:30

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 16:51

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-09 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.00171**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-6-012220

20A0285-09 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 16:30

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 17:06

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-09 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	**0.523**	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-6-012220

20A0285-09RE1 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 16:30

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 20:17

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-09RE1 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-14-012220

20A0285-10 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 16:40

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 16:55

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-10 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.0120**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-14-012220

20A0285-10 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 16:40

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 17:28

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-10 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-14-012220

20A0285-10RE1 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 16:40

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 20:37

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-10RE1 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-20DD-012220

20A0285-11 (Water)

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 01/22/2020 00:00

Instrument: ICPMS1 Analyst: MCB — Analyzed: 02/05/2020 16:59

Sample Preparation: Preparation Method: REN EPA 600/4-79-020 4.1.4 HNO3 matrix — Extract ID: 20A0285-11 A 01

Preparation Batch: BIB0055 — Sample Size: 25 mL

Prepared: 02/04/2020 — Final Volume: 25 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.000200	**0.0125**	mg/L	

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-20DD-012220

20A0285-11 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 00:00

Instrument: DX2100 Analyst: KOTT — Analyzed: 01/23/2020 17:48

Sample Preparation: Preparation Method: No Prep Wet Chem — Extract ID: 20A0285-11 A

Preparation Batch: BIA0464 — Sample Size: 5 mL

Prepared: 01/23/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrite-N	14797-65-0	1	0.100	0.100	ND	mg/L	U

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

MW-20DD-012220

20A0285-11RE1 (Water)

Wet Chemistry

Method: EPA 300.0 — Sampled: 01/22/2020 00:00

Instrument: IC930 Analyst: CDE — Analyzed: 02/06/2020 20:57

Sample Preparation: Preparation Method: SM 5310 A-00, 0.45um filtration — Extract ID: 20A0285-11RE1 B

Preparation Batch: BIB0123 — Sample Size: 5 mL

Prepared: 02/06/2020 — Final Volume: 5 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Orthophosphorus	1426-54-42	1	0.10	0.10	ND	mg/L	H, U

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

Metals and Metallic Compounds (dissolved) - Quality Control

Batch BIB0055 - REN EPA 600/4-79-020 4.1.4 HNO3 matrix

Instrument: ICPMS1 Analyst: MCB

QC Sample/Analyte	Isotope	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BIB0055-BLK1)					Prepared: 04-Feb-2020 Analyzed: 05-Feb-2020 14:29						
Arsenic, Dissolved	75a	ND	0.000200	mg/L							U
LCS (BIB0055-BS1)					Prepared: 04-Feb-2020 Analyzed: 05-Feb-2020 14:33						
Arsenic, Dissolved	75a	0.0238	0.000200	mg/L	0.0250		95.1	80-120			
Duplicate (BIB0055-DUP1)		**Source: 20A0285-01**			Prepared: 04-Feb-2020 Analyzed: 05-Feb-2020 16:14						
Arsenic, Dissolved	75a	0.00127	0.000200	mg/L		0.00121			5.08	20	
Matrix Spike (BIB0055-MS1)		**Source: 20A0285-01**			Prepared: 04-Feb-2020 Analyzed: 05-Feb-2020 16:20						
Arsenic, Dissolved	75a	0.0253	0.000200	mg/L	0.0250	0.00121	96.4	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

Wet Chemistry - Quality Control

Batch BIA0464 - No Prep Wet Chem

Instrument: DX2100 Analyst: KOTT

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BIA0464-BLK1)				Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 11:48							
Nitrate-N	ND	0.100	0.100	mg/L							U
Nitrite-N	ND	0.100	0.100	mg/L							U
Blank (BIA0464-BLK2)				Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 20:15							
Orthophosphorus	ND	0.10	0.10	mg/L							U
LCS (BIA0464-BS1)				Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 12:09							
Nitrate-N	1.50	0.100	0.100	mg/L	1.50		99.8	90-110			
Nitrite-N	1.47	0.100	0.100	mg/L	1.50		97.9	90-110			
LCS (BIA0464-BS2)				Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 20:36							
Orthophosphorus	1.36	0.10	0.10	mg/L	1.50		90.4	90-110			
Duplicate (BIA0464-DUP1)		**Source: 20A0285-01**		Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 12:50							
Nitrate-N	0.261	0.100	0.100	mg/L		0.260			0.38	20	
Nitrite-N	ND	0.100	0.100	mg/L		ND					U
Duplicate (BIA0464-DUP2)		**Source: 20A0285-01RE1**		Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 21:19							
Orthophosphorus	ND	0.10	0.10	mg/L		ND					U
Matrix Spike (BIA0464-MS1)		**Source: 20A0285-01**		Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 13:11							
Nitrate-N	2.28	0.100	0.100	mg/L	2.00	0.260	101	75-125			
Nitrite-N	1.97	0.100	0.100	mg/L	2.00	ND	98.7	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Matrix Spike (BIA0464-MS2)		**Source: 20A0285-01RE1**		Prepared: 23-Jan-2020 Analyzed: 23-Jan-2020 21:40							
Orthophosphorus	1.77	0.10	0.10	mg/L	2.00	ND	88.5	75-125			

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

Wet Chemistry - Quality Control

Batch BIB0123 - SM 5310 A-00, 0.45um filtration

Instrument: IC930 Analyst: CDE

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BIB0123-BLK1)				Prepared: 06-Feb-2020 Analyzed: 06-Feb-2020 15:37							
Orthophosphorus	ND	0.10	0.10	mg/L							U
LCS (BIB0123-BS1)				Prepared: 06-Feb-2020 Analyzed: 06-Feb-2020 15:57							
Orthophosphorus	4.75	0.10	0.10	mg/L	5.00		94.9	90-110			
Duplicate (BIB0123-DUP1)		**Source: 20A0285-01RE2**		Prepared: 06-Feb-2020 Analyzed: 06-Feb-2020 16:37							
Orthophosphorus	ND	0.10	0.10	mg/L		ND					H, U
Matrix Spike (BIB0123-MS1)		**Source: 20A0285-01RE2**		Prepared: 06-Feb-2020 Analyzed: 06-Feb-2020 16:57							
Orthophosphorus	1.60	0.10	0.10	mg/L	2.00	ND	79.8	75-125			H

Recovery limits for target analytes in MS/MSD QC samples are advisory only.

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Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

Certified Analyses included in this Report

Analyte	Certifications
EPA 200.8 UCT-KED in Water	
Arsenic-75a	NELAP,WADOE,WA-DW,DoD-ELAP
EPA 300.0 in Water	
Nitrate-N	DoD-ELAP,WADOE,WA-DW,NELAP
Nitrite-N	DoD-ELAP,WADOE,WA-DW,NELAP
Orthophosphorus	DoD-ELAP,WADOE,WA-DW,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	01/31/2021
CALAP	California Department of Public Health CAELAP	2748	06/30/2019
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	01/01/2021
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2020
WADOE	WA Dept of Ecology	C558	06/30/2019
WA-DW	Ecology - Drinking Water	C558	06/30/2019

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: 28006013 - 1Q Sampling	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	13-Feb-2020 16:10

Notes and Definitions

*	Flagged value is not within established control limits.
D	The reported value is from a dilution
H	Hold time violation - Hold time was exceeded.
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
[2C]	Indicates this result was quantified on the second column on a dual column analysis.

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

Denver #280 TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: David Unruh / Dylon Bransom	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-23414-6845.1
Client Contact: Meilani Lonier-Kamahaio	Phone: (206) 413-5408	E-Mail: betsy.sara@testamericainc.com		Page: 1/2
Company: Aspect Consulting, LLC				Job #:
Address: 350 Madison Ave N	Due Date Requested:			
City: Bainbridge Island	TAT Requested (days):			
State, Zip: WA, 98110				
Phone:	PO #: Purchase Order not required			
Email: mlkamahaio@aspectconsulting.com	WO #:			
Project Name: Hansville Landfill	Project #:skip sites/events 28006013 - 1Q Sampling			
Site: Washington	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C SIM - Vinyl Chloride (TA Buffalo)	Dissolved Metals	Ammonia/TOC	Alks/Cl/SO4	Ortho-phosphate (field filtered) - Direct sub to ARI	Dissolved Arsenice (Direct sub to ARI)	8260C - Full Scan VOA (TA Buffalo)	Nitrate/Nitrite (IC) - Direct sub to ARI	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	S	N	N	D	A	N		
MW-7-012220	1/22/20	0845		W	Y		X	X	X	X			X			
MW-5-012220		0945														
SW-1-012220		1155														Diss As,NO3,NO2,o-phos subbed direct to ARI
MW-12I-012220		1215														
SW-4-012220		1205														
SW-6-012220		1340														
MW-13D-012220		1340														
SW-7-012220		1500														
MW-6-012220		1630														
MW-14-012220		1640														
MW-20DD-012220	↓	—		↓	↓		↓	↓	↓	↓			↓			

280-133169 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
David Unruh	1/23/20 0840	Aspect		1/24/20 0920	TADEN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.8, -0.7, 0.2, +0.4, 1.2, 5.8, 1/24/20

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

Denver #280 TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: David Unruh / Dylan Branson	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-23414-6845.1
Client Contact: Meiloni Lonis-Kamuhaba	Phone: (206)413-5408	E-Mail: betsy.sara@testamericainc.com		Page: 2/2
Company: Aspect Consulting, LLC				Job #:

Address: 350 Madison Ave N	Due Date Requested:	Analysis Requested
City: Bainbridge Island	TAT Requested (days):	
State, Zip: WA, 98110		
Phone:	PO #: Purchase Order not required	
Email: mlkamuhaba@aspectconsulting.com	WO #:	
Project Name: Hansville Landfill	Project #:skip sites/events 28006013 - 1Q Sampling	
Site: Washington	SSOW#:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C SIM - Vinyl Chloride (TA Buffalo)	Dissolved Metals	Ammonia/TOC	Alks/Cl/SO4	Ortho-phosphate (field filtered) - Direct sub to ARI	Dissolved Arsenice (Direct sub to ARI)	8260C - Full Scan VOA (TA Buffalo)	Nitrate/Nitrite (IC) - Direct sub to ARI							Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	A	D	S	N	N	D	A	N							X	
Trip Blank	—	—		W			X						X									
																						Diss As,NO3,NO2,o-phos subbed direct to ARI

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Donald Unruh - David Unruh	1/23/20 0840	Aspect		1/24/20 0900	TAEN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

280-133169 Waybill

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-513747.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: betsy.sara@testamericainc.com	State of Origin: Washington	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Washington		Job #: 280-133169-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 2/5/2020			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Hansville Landfill	Project #: 28006013			
Site: Hansville	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C_SIM/5030C (MOD) Local Method	8260C/5030C (MOD) Appendix II Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW7-012220 (280-133169-1)	1/22/20	08:45 Pacific		Water			X	X	6	
MW5-012220 (280-133169-2)	1/22/20	10:45 Pacific		Water			X	X	6	
SW1-012220 (280-133169-3)	1/22/20	11:55 Pacific		Water			X	X	6	
MW12I-012220 (280-133169-4)	1/22/20	12:15 Pacific		Water			X	X	6	
SW4-012220 (280-133169-5)	1/22/20	13:05 Pacific		Water			X	X	6	
SW6-012220 (280-133169-6)	1/22/20	13:40 Pacific		Water			X	X	6	
MW13D-012220 (280-133169-7)	1/22/20	13:40 Pacific		Water			X	X	6	
SW7-012220 (280-133169-8)	1/22/20	15:00 Pacific		Water			X	X	6	
MW6-012220 (280-133169-9)	1/22/20	16:30 Pacific		Water			X	X	6	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	1/27/2020 1330		[signature]	1-28-20 9:30	ETAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		ICE # 2.0

Ver: 01/16/2019

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone: 303-736-0100 Fax: 303-431-7171

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-513747.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: betsy.sara@testamericainc.com	State of Origin: Washington	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Washington		Job #: 280-133169-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 2/5/2020			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Hansville Landfill	Project #: 28006013			
Site: Hansville	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C_SIM/5030C (MOD) Local Method	8260C/5030C (MOD) Appendix II Volatiles	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW14-012220 (280-133169-10)	1/22/20	16:40 Pacific		Water			X	X	6	
MW20DD-012220 (280-133169-11)	1/22/20	Pacific		Water			X	X	6	
TB1 (280-133169-12)	1/22/20	16:40 Pacific		Water			X	X	12	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	1/27/2020 1330		[signature]	1-28-20 9:30	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		1.6 ICE #1

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Aspect Consulting

Job Number: 280-133169-1

Login Number: 133169

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Zimmerman, Steven M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Aspect Consulting

Job Number: 280-133169-1

Login Number: 133169
List Number: 2
Creator: Yeager, Brian A

List Source: Eurofins TestAmerica, Buffalo
List Creation: 01/28/20 11:18 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	ice ir gun #1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	