August 31, 2017

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

Re: Second Quarter 2017 Environmental Monitoring Report, Hansville Landfill, Kitsap County, Washington
Project No. 160423-05.1

Dear Alexis:

This quarterly report summarizes the results of the environmental monitoring conducted at the Hansville Landfill (Site) during the second quarter of 2017, 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) and the Compliance Monitoring Plan with Sampling & Analysis Plan and Quality Assurance Plan (Compliance Monitoring Plan) (SCS Engineers, 2011), except where otherwise noted.

During the second quarter of 2017, conditions monitored at the Site 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 Engineers, 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.

Site Activities—Second Quarter 2017

Site activities 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 activities performed during the second quarter of 2017 is provided below.

- On April 11, 2017, 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 Engineers, 2011).
- On April 25 and May 16, 2017, Aspect conducted monthly system tuning of the landfill gas system. On April 25, 2017, the rates of flow to Trench Wells TR-1 through TR-7 were increased as much as possible in order to provide as much vacuum as possible across the landfill. Additionally, landfill gas system tuning on May 2, 2017, was conducted to measure flow rates using an anemometer in trench wells.
- On June 13, 2017, Aspect conducted landfill gas monitoring in accordance with the Compliance Monitoring Plan (SCS Engineers, 2011).

Deviations from the Compliance Monitoring Plan

There were deviations from the Compliance Monitoring Plan (SCS Engineers, 2011) during second quarter sampling, but these deviations do not affect project schedule for Site cleanup. The causes of the deviations are identified below, as are solutions for avoiding these issues during future monitoring events.

During first quarter sampling, samples were not able to be field filtered due to low pressures produced by dedicated pumps in the monitoring wells (Aspect, 2017). During second quarter sampling, a peristaltic pump was used as a booster pump, with disposable tubing inserted into the outlet of the dedicated Grundfos pumps, and water pumped through a 0.45-micrometer (µm) filter. This setup allows for samples to be field filtered as specified in the Compliance Monitoring Plan (SCS Engineers, 2011).

Some samples collected for analysis of nitrate, nitrite, and orthophosphate were not analyzed within the 48-hour hold time. Affected results were classified as useable per the data validation process in the Compliance Monitoring Plan (SCS Engineers, 2011). These data were reported and qualified as "J," flagged on Tables B-2 and B-3. Future samples will be collected, transported, and analyzed with the goal of meeting the 48-hour hold times for selected analytes.

The coolers arrived at temperatures between 6.6 degrees Celsius (°C) and 10.6 °C, above the recommended maximum temperature of 6.0 °C. The ice was melted. The laboratory proceeded with the requested analyses. Future samples will be shipped with additional ice.

Summary of Landfill Gas Conditions

The following sections provide a discussion of landfill gas monitoring, gas extraction system performance, and condensate system maintenance conducted during the second quarter of 2017.

Landfill Gas Monitoring

During the second quarter of 2017, compliance monitoring of the landfill gas collection system and compliance probes occurred on June 13, and the landfill gas collection system was tuned on April 25 and May 16.

Measurements were made with a 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 (CH4), carbon dioxide (CO2), oxygen (O2), 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 selected locations. At locations with orifice plates, the differential pressure and gas temperature were measured to calculate flow. These locations include the blower inlet, extraction wells R-2, R-3, R-11, and R-12, and trench collector TR-7. Flows at selected locations without orifice plates (including trench collectors TR-1, TR-2, TR-3, TR-4, TR-5, TR-6, and TR-7) were measured using a hot-wire anemometer. Table A-1 presents flow rates measured after valve adjustments, reported "adjusted."

Landfill Gas System Performance

The flow at the blower inlet was approximately 75 standard cubic feet per minute (scfm). During the second quarter of 2017, methane and carbon dioxide concentrations at the blower inlet increased, while oxygen and balance gas concentrations decreased, indicating greater rates of landfill gas collection compared to the first quarter of 2017. During the first quarter of 2017 monitoring, the elevated oxygen and balance gas concentrations at the blower inlet indicated an abundance of atmospheric air being collected, so flows were redirected from native soil extraction wells to extraction wells and trench collectors within the extent of municipal solid waste in order to improve landfill gas system performance (Aspect, 2017). During the second quarter of 2017, valves were opened at all trench collectors (TR-1, TR-2, TR-3, TR-4, TR-5, TR-6, and TR-7) in order to convey landfill gas from the south and east portions of the landfill, where limited system vacuum was observed.

Explosive Gas Control

Methane was not detected in any of the compliance gas probes. Carbon dioxide concentrations were less than 5 percent, which is within the range of natural conditions.

Summary of Groundwater and Surface Water Conditions

The following sections provide a discussion on groundwater flow, water quality, and an evaluation of statistical trends for selected groundwater parameters.

Groundwater Flow

Groundwater surface elevations from the second quarter of 2017 are presented in Table B-1. Groundwater elevations ranged from 238.8 feet North American Vertical Datum of 1988 (NAVD88) in MW-12I to 267.7 feet NAVD88 in MW-5. Groundwater at the Site flows generally towards the southwest. Groundwater gradients range from 0.007 feet/feet in the upgradient areas, to 0.03 feet/feet further downgradient, with the gradient steepening as it approaches the groundwater discharge area (Figure B-1). Groundwater elevation and gradient conditions are consistent with those presented in previous monitoring events.

Groundwater and Surface Water Quality

Groundwater quality results from the second quarter of 2017 are presented in Table B-2, including field parameters, conventional parameters, dissolved metals, and volatile organic compounds. During the second quarter of 2017, vinyl chloride concentrations in groundwater were above the Site-specific groundwater cleanup level of 0.025 micrograms per liter (µg/L) at three monitoring wells, including MW-6 (0.096 µg/L), MW-12I (0.077 µg/L), and MW-14 (0.14µg/L). These values are consistent with the decreasing trend in vinyl chloride concentrations observed during previous monitoring events. Well MW-14 also had exceedances of Site-specific cleanup levels for manganese (2.6 milligrams per liter [mg/L]) and for arsenic (0.0169 mg/L), which is consistent with previous monitoring events.

Surface water quality results from the second quarter of 2017 are presented in Table B-3, including field parameters, conventional parameters, dissolved metals, and volatile organic compounds. During the second quarter of 2017, no volatile organic compounds were detected in surface water samples. Vinyl chloride has not been detected in surface water samples since the third quarter of 2013, and reporting limits have been less than 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. In general, dissolved arsenic concentrations in groundwater have been less than the cleanup level of 0.005 mg/L, except at MW-14. Vinyl chloride concentrations in groundwater have been less than the cleanup level of 0.025 µg/L, except at MW-6, MW-12I, and MW-14.

Figure C-3 shows time-series plots of historical and 10-year projected groundwater concentrations for MW-6 (vinyl chloride), MW-12I (vinyl chloride), and MW-14 (arsenic and vinyl chloride). Projected groundwater concentrations reflect the exponential trend of historical groundwater concentrations. Optimizing landfill gas collection will reduce the gas-to-groundwater pathway, and may achieve groundwater cleanup levels within a shorter time frame than shown on Figure C-3.

Statistical Evaluation of Groundwater Trends

Dissolved arsenic and/or vinyl chloride concentrations in groundwater show statistically significant decreasing trends at monitoring wells MW-6, MW-12I, and MW-14, where one or both constituents have been detected above Site-specific cleanup levels.

Statistical analysis of groundwater data was performed in accordance with the Compliance Monitoring Plan (SCS Engineers, 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.

Table C-1 provides results of statistical analysis for arsenic and vinyl chloride for monitoring wells where the most recent quarterly results exceeded their Site-specific cleanup levels. The statistical trend summarizes the results of Mann-Kendall Test and Sen's Slope analysis. In all cases, the

trends are 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). In all cases, the trends are decreasing because the Sen's Slope is negative[1]. In summary, Table C-1 shows that dissolved arsenic concentrations in groundwater at MW-14, and vinyl chloride concentrations in groundwater at MW-6, MW-12I, and MW-14, have statistically significant downward trends.

The annual report will provide additional statistical evaluation, including updates for the Upper and Lower Confidence Limits at selected wells to provide context for projected groundwater concentrations.

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 on 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.

During the second quarter of 2017, dissolved oxygen represented the clearest indicator of landfill effects. The downgradient monitoring wells show lower dissolved oxygen concentrations than the upgradient well (MW-5) or surface water sampling locations (SW-1, SW-4, SW-6, and SW-7), consistent with previous observations. Based on similar concentrations for other geochemical parameters (such as chloride) across the Site, there appears to be little if any leachate effect on groundwater and surface water quality. Optimizing landfill gas collection will reduce the gas-to-groundwater pathway that appears to be affecting groundwater geochemistry, and will reduce the potential for vinyl chloride and arsenic impacts to groundwater.

References

Aspect Consulting, LLC (Aspect), 2017, First Quarter 2017 Environmental Monitoring Report, Hansville Landfill, Kitsap County, WA, April 28, 2017.

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

[1] Sen's slope values reflect the median of the slopes of historical data pairs, and have been provided in units of µg/L per day in previous reports by SCS Engineers. Starting with this report, Sen's slope values will be provided in units of µg/L per year, which may be easier to interpret. For comparison, Table C-1 provides Sen's slope values for both units.

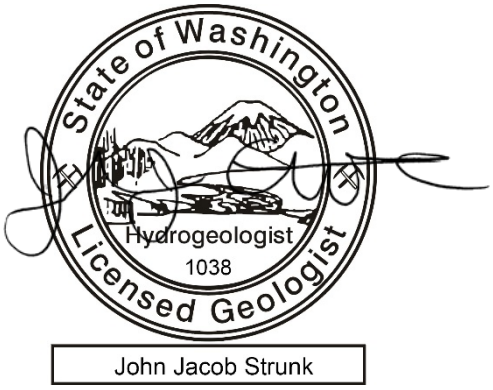
Limitations

Work for this project was performed for the Kitsap County Public Works, Solid Waste Division (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



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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
Jan Brower, Kitsap Public Health District
David South, Washington State Department of Ecology
Sam Phillips, Port Gamble S'Klallam Tribe

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ATTACHMENT A

Landfill Gas Data

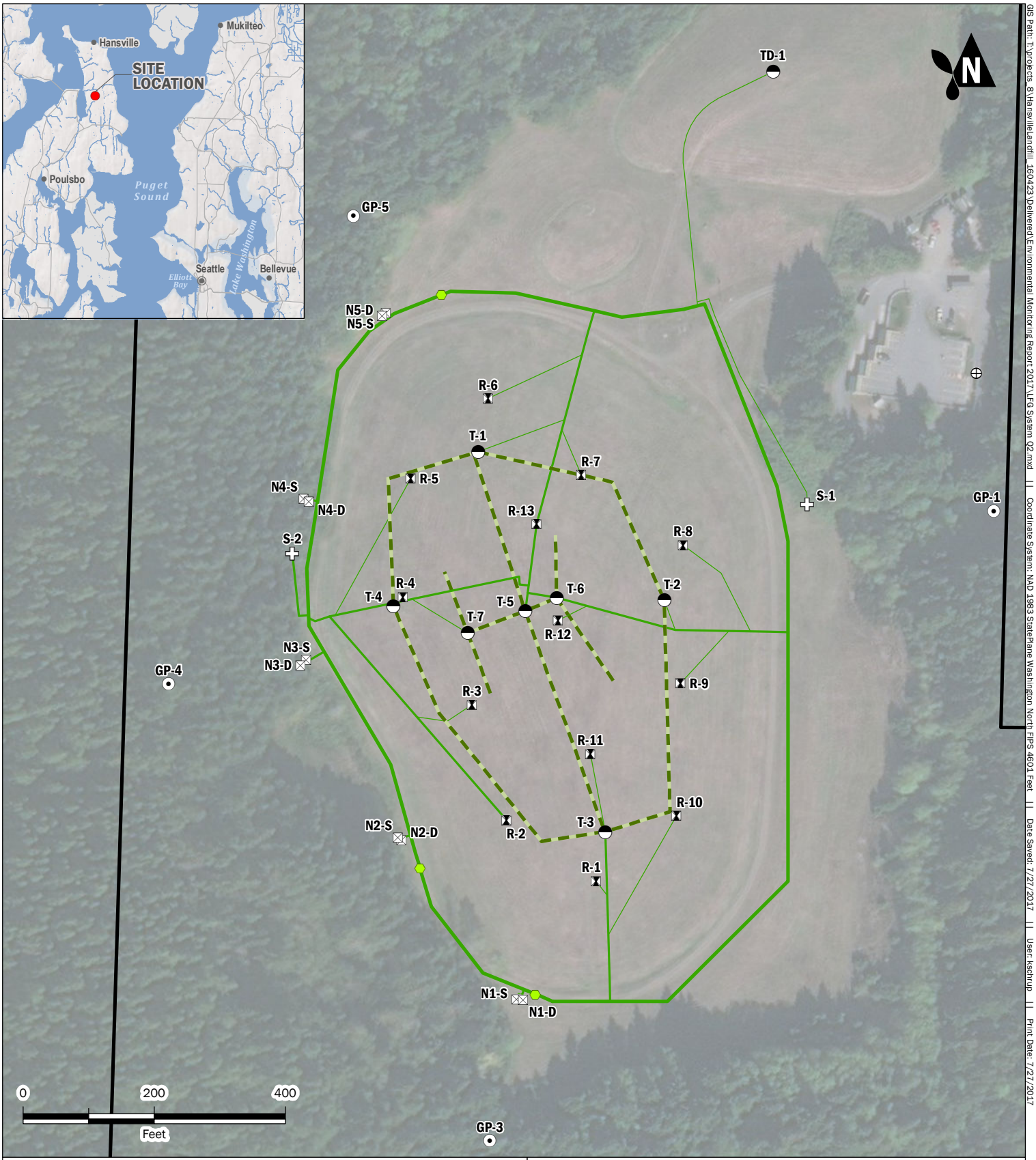
Table A-1 – Landfill Gas Data, June 13, 2017

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	Maximum	Initial	Adjusted	Maximum	Initial	Adjusted
Blower Inlet	HANSBLIN	6/13/2017 14:14	3.4	14.4	1.4	80.8	-3.33	-3.3	-3.3	65.7	65.7	65.7	72.2 *	71.4 *
Blower Outlet	HANSBLOT	6/13/2017 14:17	3.3	14.4	1.4	80.9	0.05	0.05	0.05	60	60.2	60.2	N/A	N/A
Extraction Well 001	HANSR001	6/13/2017 9:12	6.9	11.6	0	81.5	-0.86	-0.85	-0.85	57	57	57	N/A	N/A
Extraction Well 002	HANSR002	6/13/2017 10:51	1.9	14.1	2.6	81.4	-1.73	-1.72	-1.72	64.5	64.5	64.5	N/A	N/A
Extraction Well 003	HANSR003	6/13/2017 10:45	7.6	13.3	0	79.1	-0.76	-0.81	-0.76	59.7	59.6	59.7	2 *	1.8 *
Extraction Well 004	HANSR004	6/13/2017 10:29	2.9	14.8	1.3	81	-1.9	-1.9	-1.9	61.1	61.1	61.1	0.7 *	0.7 *
Extraction Well 005	HANSR005	6/13/2017 10:18	3.8	15.5	1.9	78.8	-2.13	-2.12	-2.12	66	66.2	66.2	N/A	N/A
Extraction Well 006	HANSR006	6/13/2017 10:03	2.4	15.4	2.7	79.5	-1.16	-1.17	-1.16	61.8	61.8	61.8	N/A	N/A
Extraction Well 007	HANSR007	6/13/2017 9:56	1.6	13.9	0.4	84.1	-1.09	-1.1	-1.09	63.5	63.5	63.5	N/A	N/A
Extraction Well 008	HANSR008	6/13/2017 8:48	5.1	15.4	1.6	77.9	-0.89	-0.9	-0.89	59.4	59.4	59.4	N/A	N/A
Extraction Well 009	HANSR009	6/13/2017 9:01	1.2	13.9	3	81.9	-0.87	-0.88	-0.87	57.2	57.2	57.2	N/A	N/A
Extraction Well 010	HANSR010	6/13/2017 9:07	6.1	9.4	3.8	80.7	-0.86	-0.85	-0.85	55.2	55.2	55.2	N/A	N/A
Extraction Well 011	HANSR011	6/13/2017 9:22	4	4.3	0	91.7	-0.67	-0.67	-0.67	54	54	54	0.2 *	0.3 *
Extraction Well 012	HANSR012	6/13/2017 9:28	13.5	2.8	0.2	83.5	-0.78	-0.8	-0.78	53	52.9	53	0 *	0.1 *
Extraction Well 013	HANSR013	6/13/2017 9:46	4.9	10.9	1.1	83.1	-1.3	-1.32	-1.3	56.3	56.3	56.3	N/A	N/A
Trench Collector TD-1	HANSTD01	6/13/2017 8:27	0.8	18.9	0.1	80.2	-0.38	-0.38	-0.38	55.6	55.6	55.6	N/A	N/A
Trench Collector TR-1	HANSTR01	6/13/2017 10:10	3.1	14.1	2.6	80.2	-1.01	-0.99	-0.99	63.9	63.9	63.9	N/A	13.7 **
Trench Collector TR-2	HANSTR02	6/13/2017 8:54	2.1	13.8	3.4	80.7	-0.97	-0.96	-0.96	58.2	58.2	58.2	N/A	2.7 **
Trench Collector TR-3	HANSTR03	6/13/2017 9:17	5	8.3	5.2	81.5	-0.92	-0.9	-0.9	56.8	56.8	56.8	N/A	8.7 **
Trench Collector TR-4	HANSTR04	6/13/2017 10:25	5.5	14.4	1.1	79	-1.44	-1.44	-1.44	59.6	59.6	59.6	N/A	43.1 **
Trench Collector TR-5	HANSTR05	6/13/2017 9:39	9.1	3.5	6.3	81.1	-0.01	-0.01	-0.01	53.8	53.8	53.8	N/A	1.31 **
Trench Collector TR-6	HANSTR06	6/13/2017 9:31	3	12.9	3.2	80.9	-0.86	-0.87	-0.86	56.4	56.4	56.4	N/A	6 **
Trench Collector TR-7	HANSTR07	6/13/2017 10:39	11.1	13	1.1	74.8	-0.86	-0.86	-0.86	58.4	58.3	58.4	2.4 *	4.2 **
Native Soil Extraction Well 1 Shallow	HANSN01S	6/13/2017 11:36	0	0.5	20.2	79.3	-0.79	-0.79	-0.79	70.2	70.3	70.3	N/A	N/A
Native Soil Extraction Well 1 Deep	HANSN01D	6/13/2017 11:29	0	0.4	20.5	79.1	-0.82	-0.83	-0.82	68.9	69	69	N/A	N/A
Native Soil Extraction Well 2 Shallow	HANSN02S	6/13/2017 11:45	0	0.2	20.6	79.2	-0.05	-0.06	-0.05	66.9	66.9	66.9	N/A	N/A
Native Soil Extraction Well 2 Deep	HANSN02D	6/13/2017 11:41	0	0.1	20.6	79.3	-0.08	-0.09	-0.08	67.4	67.5	67.5	N/A	N/A
Native Soil Extraction Well 3 Shallow	HANSN03S	6/13/2017 11:55	0	0.1	20.6	79.3	-0.05	-0.05	-0.05	70.2	70.3	70.3	N/A	N/A
Native Soil Extraction Well 3 Deep	HANSN03D	6/13/2017 11:50	0	1.4	18.9	79.7	-0.04	-0.06	-0.04	67.1	67.2	67.2	N/A	N/A
Native Soil Extraction Well 4 Shallow	HANSN04S	6/13/2017 12:05	0	0.1	20.7	79.2	-0.09	-0.09	-0.09	67.7	67.7	67.7	N/A	N/A
Native Soil Extraction Well 4 Deep	HANSN04D	6/13/2017 12:01	0	0.1	20.6	79.3	-0.08	-0.08	-0.08	66.9	67	67	N/A	N/A
Native Soil Extraction Well 5 Shallow	HANSN05S	6/13/2017 12:15	0	1.2	19.4	79.4	0.04	-0.02	0.04	70.5	70.5	70.5	N/A	N/A
Native Soil Extraction Well 5 Deep	HANSN05D	6/13/2017 12:11	0	0.1	20.6	79.3	-2.63	-2.64	-2.63	69.3	69.4	69.4	N/A	N/A
Gas Probe 1	HANSGP01	6/13/2017 12:28	0	0.8	20	79.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 2 Shallow	HANSGP2S	6/13/2017 12:50	0	0.1	21.3	78.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 2 Middle	HANSGP2M	6/13/2017 13:01	0	0.9	19.8	79.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 2 Deep	HANSGP2D	6/13/2017 13:13	0	0.2	21.3	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 3	HANSGP03	6/13/2017 13:25	0	0.9	21	78.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 4	HANSGP04	6/13/2017 13:41	0	1.7	19.9	78.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 5	HANSGP05	6/13/2017 14:08	0	1.3	20.1	78.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 6	HANSGP06	6/13/2017 8:36	0	3.1	18.3	78.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gas Probe 7	HANSGP07	6/13/2017 13:51	0	3.7	17.7	78.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes

* Flow rate measured using orifice plate.
** Flow rate measured with a hot-wire anemometer on 5/2/1
"N/A" indicates parameter not measured.
"inches H2O" - inches water column
"degrees F" - degrees Fahrenheit
"SCFM" - standard cubic feet per minute



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Exploration

- Condensate Sump
- Gas Detection Probe
- Gas Extraction Well (Native Soil Completion)
- 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

Second Quarter 2017 Environmental Monitoring Report
Hansville Landfill
Kitsap County, Washington

Aspect CONSULTING	JUL-2017	BY: AHP / RAP / KES	FIGURE NO. A-1
	PROJECT NO. 160423	REVISED BY: ---	

ATTACHMENT B

Water Quality Results

TABLES

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	99.2	267.7
MW-6	332	332.7	260	245	73.2	259.5
MW-7	344.3	346.0	259	244	84.1	261.9
MW-12I	245.6	248.1	217	207	9.3	238.8
MW-13D	258.1	260.4	205	195	9.8	250.6
MW-14	338.6	341.1	262	247	80.5	260.6

Notes

Depths to water collected April 11, 2017

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

Table B-2. Groundwater Quality Results

Project No. 160423, Hansville Landfill, Hansville, WA

		Groundwater Monitoring Wells					
Parameter	**Site Cleanup Level**	**MW-5**	**MW-6**	**MW-7**	**MW-12I**	**MW-13D**	**MW-14**
Field Parameters							
Dissolved Oxygen (mg/L)		**9.2**	**0.5**	**1.9**	**1.0**	**0.2**	**0.4**
pH (units)		**7.2**	**7.1**	**6.8**	**7.2**	**7.5**	**6.9**
Redox (mV)		**42**	**16**	**49**	**50**	**58**	**15**
Specific Conductivity (uS)		**148**	**400**	**298**	**167**	**198**	**303**
Temperature (degrees C)		**11.5**	**15.9**	**12.5**	**10.3**	**10.7**	**14.9**
Turbidity (NTU)							
Conventional Parameters (mg/L)							
Alkalinity		**60**	**170**	**160**	**83**	**77**	**140**
Ammonia (as N)		0.03 U	**0.096**	0.03 U	0.03 U	0.03 U	0.03 UJ
Bicarbonate		**60**	**170**	**160**	**83**	**77**	**140**
Carbonate		5 U	5 U	5 U	5 U	5 U	5 U
Chloride		**2.8**	**9.3**	**1.8**	**3.3**	**6.2**	**8.7**
Nitrate (as N)		**1.2 J**	**1.4**	**0.6 J**	0.5 U	0.5 U	0.5 U
Nitrite (as N)		0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Sulfate		**8.8**	**28**	**5**	**5.8**	**18**	**20**
Total Organic Carbon		1 U	**1.4**	**1.4**	**2.4**	1 U	1 U
Orthophosphate (as P)		0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Dissolved Metals (mg/L)							
Manganese	2.24	1 U	**0.48**	1 U	**0.54**	**0.026**	**2.6**
Arsenic	0.005	**0.00184**	**0.00184**	**0.000967**	**0.00211**	**0.00423**	**0.0169**
Volatile Organic Compounds (ug/L) [Only compounds detected in groundwater or surface water are shown.]							
Vinyl Chloride	0.025	0.02 U	**0.096**	0.02 U	**0.077**	0.02 U	**0.1**

Notes

Bold - detected
Shaded - Exceeded Site Cleanup Level
U - Not detected at or above reporting limit
J or UJ - Estimated "usable"
R - Rejected data, not representative of site conditions

mg/L - milligram per liter
mV - millivolts
uS - microSiemens
degrees C - degrees Celcius
NTU - Nephthalometric Turbidity Units

ug/L - microgram per liter

Table B-3. Surface Water Quality Results

Project No. 160423, Hansville Landfill, Hansville, WA

		Surface Water Sampling Locations			
Parameter	**Site Cleanup Level**	**SW-1**	**SW-4**	**SW-6**	**SW-7**
Field Parameters					
Dissolved Oxygen (mg/L)		**10.6**	**11.0**	**10.9**	**12.2**
pH (units)		**7.4**	**7.4**	**7.2**	**7.5**
Redox (mV)		**46**	**75**	**58**	**49**
Specific Conductivity (uS)		**157**	**290**	**88**	**102**
Temperature (degrees C)		**8.2**	**8.6**	**8.6**	**8.6**
Turbidity (NTU)		**1.6**	**3.5**	**3.6**	**3.1**
Conventional Parameters (mg/L)					
Alkalinity		**73**	**120**	**34**	**35**
Ammonia (as N)		0.03 U	0.03 U	0.03 U	0.03 U
Bicarbonate		**73**	**120**	**34**	**35**
Carbonate		5 U	5 U	5 U	5 U
Chloride		**4.5**	**11**	**3.1**	**3.1**
Nitrate (as N)		**1.6**	**1**	0.5 U	**1.6**
Nitrite (as N)		0.5 U	0.5 U	0.5 U	0.5 U
Sulfate		**11**	**16**	**5.2**	**6.5**
Total Organic Carbon		**2.9**	**11**	**19**	**10**
Orthophosphate (as P)		0.5 U	0.5 U	0.5 U	0.5 U
Dissolved Metals (mg/L)					
Manganese		**0.0019**	**0.038**	**0.026**	**0.0037**
Arsenic	0.005	**0.00145**	**0.00185**	**0.00233**	**0.000937**
Volatile Organic Compounds (ug/L) [Only compounds detected in groundwater or surface water are shown.]					
Vinyl Chloride	0.025	0.02 U	0.02 U	0.02 U	0.02 U

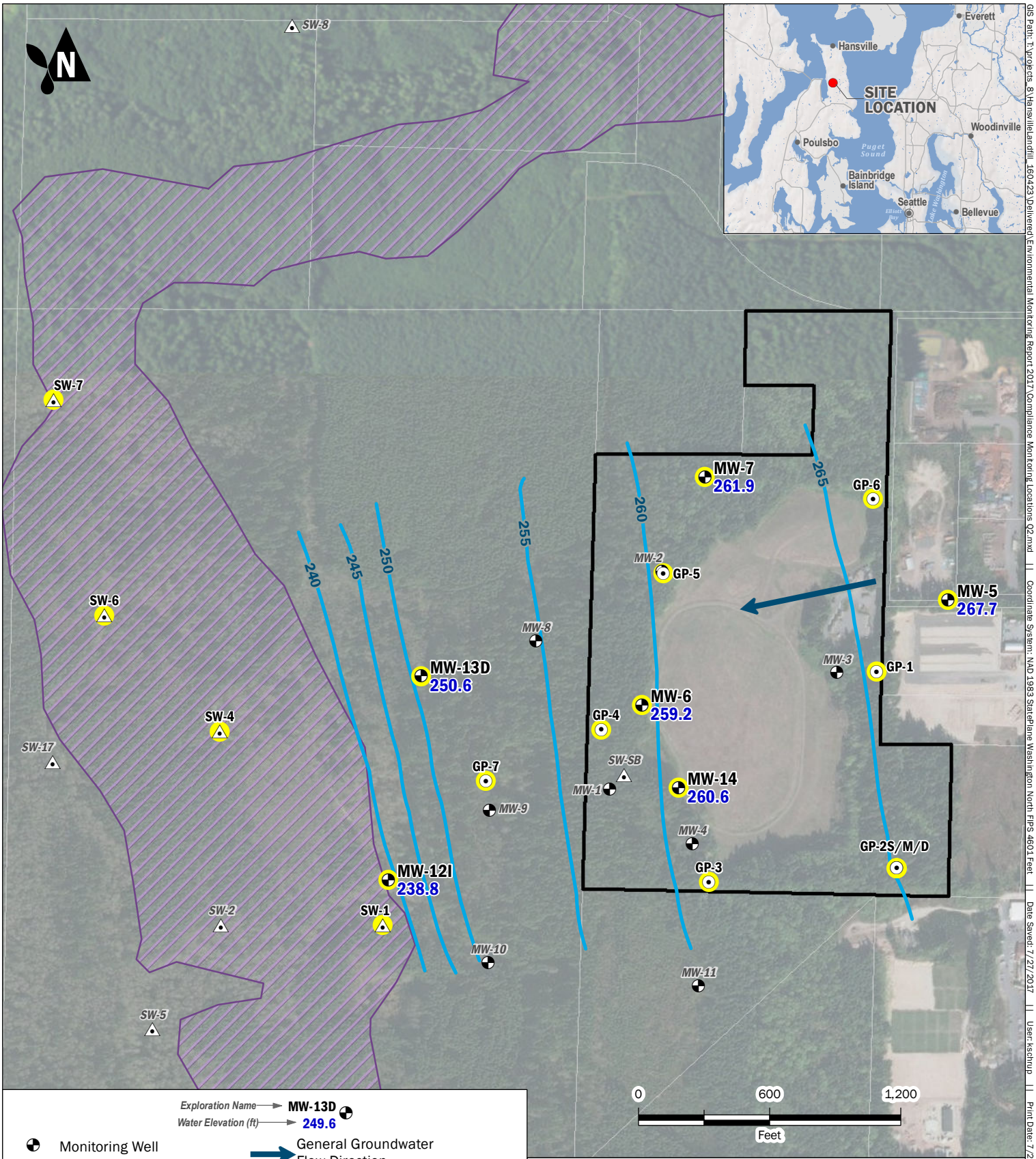
Notes

Bold - detected
Shaded - Exceeded Site Cleanup Level
U - Not detected at or above reporting limit
J or UJ - Estimated "usable"
R - Rejected data, not representative of site conditions

mg/L - milligram per liter
mV - millivolts
uS - microSiemens
degrees C - degrees Celcius
NTU - Nephthalometric Turbidity Units

ug/L - microgram per liter

FIGURE



Exploration Name → MW-13D
Water Elevation (ft) → 249.6

- Monitoring Well
- Gas Detection Probe
- Surface Water Station
- Compliance Monitoring Location
- Inferred Water Elevation Contour (ft) *Measured Jan 2017*
- General Groundwater Flow Direction
- Approximate Area of Groundwater Discharge from Upper Aquifer
- Landfill Boundary
- Tax Parcel

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

Compliance Monitoring Locations

Second Quarter 2017 Environmental Monitoring Report
Hansville Landfill
Kitsap County, Washington

Aspect Consulting	JUL-2017	BY: AHP / RAP / KES	FIGURE NO. B-1
	PROJECT NO. 160423	REVISED BY: ---	

GIS Path: T:\projects_8\Hansvillelandfill_160423\Delivered\Environmental Monitoring Report 2017\Compliance Monitoring Locations Q2.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 7/27/2017 || User: kschrup || Print Date: 7/27/2017

ATTACHMENT C

Groundwater Statistics and Time-Series Plots

TABLES

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	--	--	--	--	--		--
MW-14	Decreasing	-5.5	-1.96	41	Yes	-3.6E-06	-0.0013

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	-4.7	-1.96	42	Yes	-6.5E-05	-0.024
MW-7	--	--	--	--	--		--
MW-12I	Decreasing	-5.8	-1.96	42	Yes	-1.2E-04	-0.044
MW-13D	--	--	--	--	--		--
MW-14	Decreasing	-6.9	-1.96	42	Yes	-1.1E-04	-0.039

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.

For N<=40, Mann-Kendall scores are reported as Test Value S.

3 - "--" Indicates most recent groundwater concentrations were below the Site-specific cleanup level.

"ug/L" - micrograms per liter

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-5	Arsenic	7440-38-2	mg/L	1/23/2007	n/a		0.00214
MW-5	Arsenic	7440-38-2	mg/L	4/19/2007	n/a		0.00192
MW-5	Arsenic	7440-38-2	mg/L	7/18/2007	n/a		0.00209
MW-5	Arsenic	7440-38-2	mg/L	10/23/2007	n/a		0.00215
MW-5	Arsenic	7440-38-2	mg/L	1/16/2008	n/a		0.00204
MW-5	Arsenic	7440-38-2	mg/L	4/16/2008	n/a		0.00221
MW-5	Arsenic	7440-38-2	mg/L	7/16/2008	n/a		0.00203
MW-5	Arsenic	7440-38-2	mg/L	10/22/2008	n/a		0.00227
MW-5	Arsenic	7440-38-2	mg/L	1/20/2009	n/a		0.00207
MW-5	Arsenic	7440-38-2	mg/L	4/14/2009	n/a		0.00216
MW-5	Arsenic	7440-38-2	mg/L	7/14/2009	0.0005	ND	
MW-5	Arsenic	7440-38-2	mg/L	10/29/2009	n/a		0.0032
MW-5	Arsenic	7440-38-2	mg/L	1/27/2010	0.001	ND	
MW-5	Arsenic	7440-38-2	mg/L	4/29/2010	n/a		0.0025
MW-5	Arsenic	7440-38-2	mg/L	7/27/2010	0.0002	ND	
MW-5	Arsenic	7440-38-2	mg/L	10/26/2010	0.0002	ND	
MW-5	Arsenic	7440-38-2	mg/L	1/25/2011	n/a		0.002
MW-5	Arsenic	7440-38-2	mg/L	4/14/2011	n/a		0.0004
MW-5	Arsenic	7440-38-2	mg/L	7/25/2011	n/a		0.0018
MW-5	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.002
MW-5	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.0019
MW-5	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.00192
MW-5	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.0021
MW-5	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00177
MW-5	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.00207
MW-5	Arsenic	7440-38-2	mg/L	4/4/2013	4.00E-05		0.00185
MW-5	Arsenic	7440-38-2	mg/L	7/24/2013	4.00E-05		0.0018
MW-5	Arsenic	7440-38-2	mg/L	10/3/2013	0.0002		0.0021
MW-5	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00163
MW-5	Arsenic	7440-38-2	mg/L	4/17/2014	n/a		0.00165
MW-5	Arsenic	7440-38-2	mg/L	7/29/2014	4.00E-05		0.00176
MW-5	Arsenic	7440-38-2	mg/L	10/8/2014	8.00E-05		0.00194
MW-5	Arsenic	7440-38-2	mg/L	1/22/2015	4.00E-05		0.0019
MW-5	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.00166
MW-5	Arsenic	7440-38-2	mg/L	7/9/2015	4.00E-05		0.0016
MW-5	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0017
MW-5	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0018
MW-5	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0016
MW-5	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.00168
MW-5	Arsenic	7440-38-2	mg/L	10/20/2016	4.00E-05		0.00167
MW-5	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.00184
MW-5	Vinyl Chloride	75-01-4	ug/L	1/23/2007	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/19/2007	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/18/2007	0.01	ND	

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-5	Vinyl Chloride	75-01-4	ug/L	10/23/2007	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/16/2008	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/16/2008	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/16/2008	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/22/2008	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/20/2009	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/14/2009	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/14/2009	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/29/2009	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/27/2010	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/29/2010	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/27/2010	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/26/2010	0.01	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/25/2011	0.004	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/14/2011	0.004	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/25/2011	0.004	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/24/2013	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/29/2014	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/9/2014	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/22/2015	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/9/2015	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	1/25/2017	0.02	ND	
MW-5	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02	ND	
MW-6	Arsenic	7440-38-2	mg/L	1/23/2007	n/a		0.00535
MW-6	Arsenic	7440-38-2	mg/L	4/19/2007	n/a		0.00534
MW-6	Arsenic	7440-38-2	mg/L	7/18/2007	n/a		0.00526
MW-6	Arsenic	7440-38-2	mg/L	10/23/2007	n/a		0.00464
MW-6	Arsenic	7440-38-2	mg/L	1/16/2008	n/a		0.00401

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-6	Arsenic	7440-38-2	mg/L	4/16/2008	n/a		0.00465
MW-6	Arsenic	7440-38-2	mg/L	7/16/2008	n/a		0.00427
MW-6	Arsenic	7440-38-2	mg/L	10/22/2008	n/a		0.00464
MW-6	Arsenic	7440-38-2	mg/L	1/20/2009	n/a		0.00437
MW-6	Arsenic	7440-38-2	mg/L	4/14/2009	n/a		0.00434
MW-6	Arsenic	7440-38-2	mg/L	7/14/2009	n/a		0.0017
MW-6	Arsenic	7440-38-2	mg/L	10/29/2009	n/a		0.0058
MW-6	Arsenic	7440-38-2	mg/L	1/27/2010	0.001	ND	
MW-6	Arsenic	7440-38-2	mg/L	4/29/2010	n/a		0.0048
MW-6	Arsenic	7440-38-2	mg/L	7/27/2010	n/a		0.0028
MW-6	Arsenic	7440-38-2	mg/L	10/26/2010	0.002	ND	
MW-6	Arsenic	7440-38-2	mg/L	1/25/2011	n/a		0.0049
MW-6	Arsenic	7440-38-2	mg/L	4/14/2011	n/a		0.0013
MW-6	Arsenic	7440-38-2	mg/L	7/25/2011	n/a		0.0027
MW-6	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0032
MW-6	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00319
MW-6	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.00162
MW-6	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.0036
MW-6	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.0033
MW-6	Arsenic	7440-38-2	mg/L	1/3/2013	0.0002		0.0035
MW-6	Arsenic	7440-38-2	mg/L	4/4/2013	0.0002		0.0033
MW-6	Arsenic	7440-38-2	mg/L	7/24/2013	4.00E-05		0.00259
MW-6	Arsenic	7440-38-2	mg/L	10/3/2013	0.0001		0.0023
MW-6	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00259
MW-6	Arsenic	7440-38-2	mg/L	4/17/2014	n/a		0.00213
MW-6	Arsenic	7440-38-2	mg/L	7/29/2014	0.0001		0.0021
MW-6	Arsenic	7440-38-2	mg/L	10/8/2014	8.00E-05		0.00181
MW-6	Arsenic	7440-38-2	mg/L	1/22/2015	4.00E-05		0.00178
MW-6	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.00173
MW-6	Arsenic	7440-38-2	mg/L	7/9/2015	4.00E-05		0.00164
MW-6	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0016
MW-6	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0018
MW-6	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0017
MW-6	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.00152
MW-6	Arsenic	7440-38-2	mg/L	10/20/2016	0.0002		0.00156
MW-6	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.00184
MW-6	Vinyl Chloride	75-01-4	ug/L	1/23/2007	n/a		0.316
MW-6	Vinyl Chloride	75-01-4	ug/L	4/19/2007	n/a		0.45
MW-6	Vinyl Chloride	75-01-4	ug/L	7/18/2007	n/a		0.502
MW-6	Vinyl Chloride	75-01-4	ug/L	10/23/2007	n/a		0.38
MW-6	Vinyl Chloride	75-01-4	ug/L	1/16/2008	n/a		0.38
MW-6	Vinyl Chloride	75-01-4	ug/L	4/16/2008	n/a		0.31
MW-6	Vinyl Chloride	75-01-4	ug/L	7/16/2008	n/a		0.29
MW-6	Vinyl Chloride	75-01-4	ug/L	10/22/2008	n/a		0.35

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-6	Vinyl Chloride	75-01-4	ug/L	1/20/2009	n/a		0.34
MW-6	Vinyl Chloride	75-01-4	ug/L	4/14/2009	n/a		0.41
MW-6	Vinyl Chloride	75-01-4	ug/L	7/14/2009	n/a		0.36
MW-6	Vinyl Chloride	75-01-4	ug/L	10/29/2009	n/a		0.35
MW-6	Vinyl Chloride	75-01-4	ug/L	1/27/2010	n/a		0.24
MW-6	Vinyl Chloride	75-01-4	ug/L	4/29/2010	n/a		0.22
MW-6	Vinyl Chloride	75-01-4	ug/L	7/27/2010	n/a		0.27
MW-6	Vinyl Chloride	75-01-4	ug/L	10/26/2010	n/a		0.39
MW-6	Vinyl Chloride	75-01-4	ug/L	1/25/2011	n/a		0.24
MW-6	Vinyl Chloride	75-01-4	ug/L	4/14/2011	n/a		0.21
MW-6	Vinyl Chloride	75-01-4	ug/L	7/25/2011	n/a		0.12
MW-6	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	J	0.19
MW-6	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02		0.35
MW-6	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02		0.18
MW-6	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02		0.22
MW-6	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02		0.43
MW-6	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02		0.23
MW-6	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02		0.17
MW-6	Vinyl Chloride	75-01-4	ug/L	7/24/2013	0.02		0.28
MW-6	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02		0.34
MW-6	Vinyl Chloride	75-01-4	ug/L	1/16/2014	4.00E-05		0.51
MW-6	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02		0.22
MW-6	Vinyl Chloride	75-01-4	ug/L	7/29/2014	0.02		0.35
MW-6	Vinyl Chloride	75-01-4	ug/L	10/9/2014	0.02		0.19
MW-6	Vinyl Chloride	75-01-4	ug/L	1/22/2015	0.02		0.23
MW-6	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02		0.2
MW-6	Vinyl Chloride	75-01-4	ug/L	7/9/2015	0.02		0.27
MW-6	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02		0.14
MW-6	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02		0.17
MW-6	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02		0.098
MW-6	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02		0.12
MW-6	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02		0.12
MW-6	Vinyl Chloride	75-01-4	ug/L	1/25/2017	0.02		0.16
MW-6	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02		0.096
MW-7	Arsenic	7440-38-2	mg/L	1/23/2007	n/a		0.00125
MW-7	Arsenic	7440-38-2	mg/L	4/19/2007	n/a		0.00103
MW-7	Arsenic	7440-38-2	mg/L	7/18/2007	n/a		0.00103
MW-7	Arsenic	7440-38-2	mg/L	10/23/2007	n/a		0.00117
MW-7	Arsenic	7440-38-2	mg/L	1/16/2008	n/a		0.00122
MW-7	Arsenic	7440-38-2	mg/L	4/16/2008	n/a		0.00107
MW-7	Arsenic	7440-38-2	mg/L	7/16/2008	n/a		0.00109
MW-7	Arsenic	7440-38-2	mg/L	10/22/2008	n/a		0.00127
MW-7	Arsenic	7440-38-2	mg/L	1/20/2009	n/a		0.00128
MW-7	Arsenic	7440-38-2	mg/L	4/14/2009	n/a		0.00124

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-7	Arsenic	7440-38-2	mg/L	7/14/2009	0.0005	ND	
MW-7	Arsenic	7440-38-2	mg/L	10/29/2009	n/a		0.025
MW-7	Arsenic	7440-38-2	mg/L	1/27/2010	0.001	ND	
MW-7	Arsenic	7440-38-2	mg/L	4/29/2010	n/a		0.0019
MW-7	Arsenic	7440-38-2	mg/L	7/27/2010	0.0002	ND	
MW-7	Arsenic	7440-38-2	mg/L	10/26/2010	0.0002	ND	
MW-7	Arsenic	7440-38-2	mg/L	1/25/2011	n/a		0.00059
MW-7	Arsenic	7440-38-2	mg/L	4/14/2011	n/a		0.004
MW-7	Arsenic	7440-38-2	mg/L	7/25/2011	n/a		0.00106
MW-7	Arsenic	7440-38-2	mg/L	10/4/2011	4.00E-05		0.00107
MW-7	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00106
MW-7	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.00112
MW-7	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.00112
MW-7	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00105
MW-7	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.00114
MW-7	Arsenic	7440-38-2	mg/L	4/4/2013	4.00E-05		0.00104
MW-7	Arsenic	7440-38-2	mg/L	7/24/2013	4.00E-05		0.00096
MW-7	Arsenic	7440-38-2	mg/L	10/3/2013	4.00E-05		0.00094
MW-7	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00093
MW-7	Arsenic	7440-38-2	mg/L	4/17/2014	n/a		0.00089
MW-7	Arsenic	7440-38-2	mg/L	7/29/2014	4.00E-05		0.00095
MW-7	Arsenic	7440-38-2	mg/L	10/8/2014	8.00E-05		0.00106
MW-7	Arsenic	7440-38-2	mg/L	1/22/2015	4.00E-05		0.00098
MW-7	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.00088
MW-7	Arsenic	7440-38-2	mg/L	7/9/2015	4.00E-05		0.00087
MW-7	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.001
MW-7	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.001
MW-7	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0009
MW-7	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.0009
MW-7	Arsenic	7440-38-2	mg/L	10/20/2016	4.00E-05		0.000883
MW-7	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.000967
MW-7	Vinyl Chloride	75-01-4	ug/L	1/23/2007	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/19/2007	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/18/2007	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/23/2007	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/16/2008	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/16/2008	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/16/2008	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/22/2008	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/20/2009	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/14/2009	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/14/2009	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/29/2009	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/27/2010	0.01	ND	

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-7	Vinyl Chloride	75-01-4	ug/L	4/29/2010	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/27/2010	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/26/2010	0.01	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/25/2011	0.004	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/14/2011	0.004	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/25/2011	0.004	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/24/2013	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/29/2014	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/9/2014	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/22/2015	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/9/2015	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	1/25/2017	0.02	ND	
MW-7	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02	ND	
MW-12I	Arsenic	7440-38-2	mg/L	1/23/2007	n/a		0.00188
MW-12I	Arsenic	7440-38-2	mg/L	4/19/2007	n/a		0.00164
MW-12I	Arsenic	7440-38-2	mg/L	7/18/2007	n/a		0.00167
MW-12I	Arsenic	7440-38-2	mg/L	10/23/2007	n/a		0.0018
MW-12I	Arsenic	7440-38-2	mg/L	1/16/2008	n/a		0.00159
MW-12I	Arsenic	7440-38-2	mg/L	4/16/2008	n/a		0.00167
MW-12I	Arsenic	7440-38-2	mg/L	7/16/2008	n/a		0.00169
MW-12I	Arsenic	7440-38-2	mg/L	10/22/2008	n/a		0.00217
MW-12I	Arsenic	7440-38-2	mg/L	1/20/2009	n/a		0.00172
MW-12I	Arsenic	7440-38-2	mg/L	4/14/2009	n/a		0.00192
MW-12I	Arsenic	7440-38-2	mg/L	7/14/2009	n/a		0.001
MW-12I	Arsenic	7440-38-2	mg/L	10/29/2009	n/a		0.0029
MW-12I	Arsenic	7440-38-2	mg/L	1/27/2010	0.001	ND	
MW-12I	Arsenic	7440-38-2	mg/L	4/29/2010	n/a		0.0028
MW-12I	Arsenic	7440-38-2	mg/L	7/27/2010	n/a		0.00049

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-12I	Arsenic	7440-38-2	mg/L	10/26/2010	0.0002	ND	
MW-12I	Arsenic	7440-38-2	mg/L	1/25/2011	n/a		0.0019
MW-12I	Arsenic	7440-38-2	mg/L	4/14/2011	n/a		0.004
MW-12I	Arsenic	7440-38-2	mg/L	7/25/2011	n/a		0.0018
MW-12I	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0022
MW-12I	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00222
MW-12I	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.0021
MW-12I	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.0025
MW-12I	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00205
MW-12I	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.00212
MW-12I	Arsenic	7440-38-2	mg/L	4/4/2013	4.00E-05		0.00192
MW-12I	Arsenic	7440-38-2	mg/L	7/24/2013	4.00E-05		0.00191
MW-12I	Arsenic	7440-38-2	mg/L	10/3/2013	0.0002		0.0022
MW-12I	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00201
MW-12I	Arsenic	7440-38-2	mg/L	4/17/2014	n/a		0.00205
MW-12I	Arsenic	7440-38-2	mg/L	7/29/2014	4.00E-05		0.00219
MW-12I	Arsenic	7440-38-2	mg/L	10/8/2014	4.00E-05		0.00229
MW-12I	Arsenic	7440-38-2	mg/L	1/21/2015	4.00E-05		0.00236
MW-12I	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.00227
MW-12I	Arsenic	7440-38-2	mg/L	7/9/2015	4.00E-05		0.00216
MW-12I	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0022
MW-12I	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0024
MW-12I	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0021
MW-12I	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.00221
MW-12I	Arsenic	7440-38-2	mg/L	10/20/2016	4.00E-05		0.00226
MW-12I	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.00211
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/23/2007	n/a		0.485
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/19/2007	n/a		0.531
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/18/2007	n/a		0.771
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/23/2007	n/a		0.814
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/16/2008	n/a		0.42
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/16/2008	n/a		0.37
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/16/2008	n/a		0.42
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/22/2008	n/a		0.58
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/20/2009	n/a		0.38
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/14/2009	n/a		0.42
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/14/2009	n/a		0.45
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/29/2009	n/a		0.68
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/27/2010	n/a		0.29
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/29/2010	n/a		0.26
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/27/2010	n/a		0.4
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/26/2010	n/a		0.5
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/25/2011	n/a		0.21
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/14/2011	n/a		0.16

Table C-2. Statistical Dataset

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Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/25/2011	n/a		0.2
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	J	0.24
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02		0.19
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02		0.13
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02		0.15
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02		0.34
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02		0.11
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02		0.16
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/24/2013	0.02		0.16
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02		0.23
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02		0.22
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02		0.089
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/29/2014	0.02		0.28
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/8/2014	0.02		0.23
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/21/2015	0.02		0.094
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02		0.083
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/9/2015	0.02		0.19
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02		0.39
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02		0.13
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02		0.11
MW-12I	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02		0.11
MW-12I	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02		0.13
MW-12I	Vinyl Chloride	75-01-4	ug/L	1/25/2017	0.02		0.06
MW-12I	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02		0.077
MW-13D	Arsenic	7440-38-2	mg/L	1/23/2007	n/a		0.00295
MW-13D	Arsenic	7440-38-2	mg/L	4/19/2007	n/a		0.00289
MW-13D	Arsenic	7440-38-2	mg/L	7/18/2007	n/a		0.00285
MW-13D	Arsenic	7440-38-2	mg/L	10/23/2007	n/a		0.00303
MW-13D	Arsenic	7440-38-2	mg/L	1/16/2008	n/a		0.0029
MW-13D	Arsenic	7440-38-2	mg/L	4/16/2008	n/a		0.0032
MW-13D	Arsenic	7440-38-2	mg/L	7/16/2008	n/a		0.00299
MW-13D	Arsenic	7440-38-2	mg/L	10/22/2008	n/a		0.00342
MW-13D	Arsenic	7440-38-2	mg/L	1/20/2009	n/a		0.0031
MW-13D	Arsenic	7440-38-2	mg/L	4/14/2009	n/a		0.00333
MW-13D	Arsenic	7440-38-2	mg/L	7/14/2009	n/a		0.0042
MW-13D	Arsenic	7440-38-2	mg/L	10/29/2009	n/a		0.0037
MW-13D	Arsenic	7440-38-2	mg/L	1/27/2010	0.001	ND	
MW-13D	Arsenic	7440-38-2	mg/L	4/29/2010	n/a		0.0039
MW-13D	Arsenic	7440-38-2	mg/L	7/27/2010	n/a		0.0013
MW-13D	Arsenic	7440-38-2	mg/L	10/26/2010	n/a		0.0014
MW-13D	Arsenic	7440-38-2	mg/L	1/25/2011	n/a		0.0031
MW-13D	Arsenic	7440-38-2	mg/L	4/14/2011	n/a		0.0011
MW-13D	Arsenic	7440-38-2	mg/L	7/25/2011	n/a		0.003
MW-13D	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0032

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-13D	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00293
MW-13D	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.00307
MW-13D	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.0034
MW-13D	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00316
MW-13D	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.0034
MW-13D	Arsenic	7440-38-2	mg/L	4/4/2013	4.00E-05		0.00342
MW-13D	Arsenic	7440-38-2	mg/L	7/24/2013	4.00E-05		0.0033
MW-13D	Arsenic	7440-38-2	mg/L	10/3/2013	4.00E-05		0.00301
MW-13D	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00308
MW-13D	Arsenic	7440-38-2	mg/L	4/17/2014	n/a		0.00301
MW-13D	Arsenic	7440-38-2	mg/L	7/29/2014	4.00E-05		0.00353
MW-13D	Arsenic	7440-38-2	mg/L	10/8/2014	4.00E-05		0.00346
MW-13D	Arsenic	7440-38-2	mg/L	1/21/2015	4.00E-05		0.00353
MW-13D	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.00331
MW-13D	Arsenic	7440-38-2	mg/L	7/9/2015	4.00E-05		0.00327
MW-13D	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0038
MW-13D	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0037
MW-13D	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0035
MW-13D	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.00361
MW-13D	Arsenic	7440-38-2	mg/L	10/20/2016	4.00E-05		0.004
MW-13D	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.00423
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/23/2007	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/19/2007	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/18/2007	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/23/2007	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/16/2008	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/16/2008	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/16/2008	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/22/2008	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/20/2009	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/14/2009	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/14/2009	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/29/2009	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/27/2010	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/29/2010	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/27/2010	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/26/2010	0.01	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/25/2011	0.004	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/14/2011	0.004	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/25/2011	n/a		0.0082
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02	J	0.016
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02	J	0.0049

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/24/2013	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/29/2014	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/8/2014	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/21/2015	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/9/2015	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	1/26/2017	0.02	ND	
MW-13D	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02	ND	
MW-14	Arsenic	7440-38-2	mg/L	1/23/2007	n/a		0.0278
MW-14	Arsenic	7440-38-2	mg/L	4/19/2007	n/a		0.027
MW-14	Arsenic	7440-38-2	mg/L	7/18/2007	n/a		0.0281
MW-14	Arsenic	7440-38-2	mg/L	10/23/2007	n/a		0.0275
MW-14	Arsenic	7440-38-2	mg/L	1/16/2008	n/a		0.0226
MW-14	Arsenic	7440-38-2	mg/L	4/16/2008	n/a		0.0266
MW-14	Arsenic	7440-38-2	mg/L	7/16/2008	n/a		0.0233
MW-14	Arsenic	7440-38-2	mg/L	10/22/2008	n/a		0.03
MW-14	Arsenic	7440-38-2	mg/L	1/20/2009	n/a		0.025
MW-14	Arsenic	7440-38-2	mg/L	4/14/2009	n/a		0.0245
MW-14	Arsenic	7440-38-2	mg/L	7/14/2009	n/a		0.025
MW-14	Arsenic	7440-38-2	mg/L	10/29/2009	n/a		0.0049
MW-14	Arsenic	7440-38-2	mg/L	1/27/2010	n/a		0.02
MW-14	Arsenic	7440-38-2	mg/L	4/29/2010	n/a		0.023
MW-14	Arsenic	7440-38-2	mg/L	7/27/2010	n/a		0.033
MW-14	Arsenic	7440-38-2	mg/L	10/26/2010	n/a		0.023
MW-14	Arsenic	7440-38-2	mg/L	1/25/2011	n/a		0.026
MW-14	Arsenic	7440-38-2	mg/L	4/14/2011	n/a		0.022
MW-14	Arsenic	7440-38-2	mg/L	7/25/2011	n/a		0.0205
MW-14	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0226
MW-14	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.0194
MW-14	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.00788
MW-14	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.0216
MW-14	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.0212
MW-14	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.0202

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-14	Arsenic	7440-38-2	mg/L	4/4/2013	0.0004		0.0213
MW-14	Arsenic	7440-38-2	mg/L	7/24/2013	4.00E-05		0.0184
MW-14	Arsenic	7440-38-2	mg/L	10/3/2013	4.00E-05		0.0158
MW-14	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.0151
MW-14	Arsenic	7440-38-2	mg/L	4/17/2014	n/a		0.0156
MW-14	Arsenic	7440-38-2	mg/L	7/29/2014	4.00E-05		0.016
MW-14	Arsenic	7440-38-2	mg/L	10/8/2014	0.0002		0.0246
MW-14	Arsenic	7440-38-2	mg/L	1/22/2015	4.00E-05		0.0177
MW-14	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.0157
MW-14	Arsenic	7440-38-2	mg/L	7/9/2015	4.00E-05		0.0175
MW-14	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0146
MW-14	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0158
MW-14	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0153
MW-14	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.015
MW-14	Arsenic	7440-38-2	mg/L	10/20/2016	4.00E-05		0.0144
MW-14	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.0169
MW-14	Vinyl Chloride	75-01-4	ug/L	1/23/2007	n/a		0.652
MW-14	Vinyl Chloride	75-01-4	ug/L	4/19/2007	n/a		0.77
MW-14	Vinyl Chloride	75-01-4	ug/L	7/18/2007	n/a		0.914
MW-14	Vinyl Chloride	75-01-4	ug/L	10/23/2007	n/a		0.639
MW-14	Vinyl Chloride	75-01-4	ug/L	1/16/2008	n/a		0.64
MW-14	Vinyl Chloride	75-01-4	ug/L	4/16/2008	n/a		0.81
MW-14	Vinyl Chloride	75-01-4	ug/L	7/16/2008	n/a		0.57
MW-14	Vinyl Chloride	75-01-4	ug/L	10/22/2008	n/a		0.4
MW-14	Vinyl Chloride	75-01-4	ug/L	1/20/2009	n/a		0.33
MW-14	Vinyl Chloride	75-01-4	ug/L	4/14/2009	n/a		0.34
MW-14	Vinyl Chloride	75-01-4	ug/L	7/14/2009	n/a		0.14
MW-14	Vinyl Chloride	75-01-4	ug/L	10/29/2009	n/a		0.34
MW-14	Vinyl Chloride	75-01-4	ug/L	1/27/2010	n/a		0.3
MW-14	Vinyl Chloride	75-01-4	ug/L	4/29/2010	n/a		0.27
MW-14	Vinyl Chloride	75-01-4	ug/L	7/27/2010	n/a		0.35
MW-14	Vinyl Chloride	75-01-4	ug/L	10/26/2010	n/a		0.38
MW-14	Vinyl Chloride	75-01-4	ug/L	1/25/2011	n/a		0.45
MW-14	Vinyl Chloride	75-01-4	ug/L	4/14/2011	n/a		0.32
MW-14	Vinyl Chloride	75-01-4	ug/L	7/25/2011	n/a		0.23
MW-14	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	J	0.27
MW-14	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02		0.28
MW-14	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02		0.35
MW-14	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02		0.24
MW-14	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02		0.27
MW-14	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02		0.25
MW-14	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02		0.25
MW-14	Vinyl Chloride	75-01-4	ug/L	7/24/2013	0.02		0.25
MW-14	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02		0.22

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
MW-14	Vinyl Chloride	75-01-4	ug/L	1/16/2014	4.00E-05		0.16
MW-14	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02		0.21
MW-14	Vinyl Chloride	75-01-4	ug/L	7/29/2014	0.02		0.16
MW-14	Vinyl Chloride	75-01-4	ug/L	10/9/2014	0.02		0.14
MW-14	Vinyl Chloride	75-01-4	ug/L	1/22/2015	0.02		0.19
MW-14	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02		0.21
MW-14	Vinyl Chloride	75-01-4	ug/L	7/9/2015	0.02		0.17
MW-14	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02		0.14
MW-14	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02		0.16
MW-14	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02		0.14
MW-14	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02		0.16
MW-14	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02		0.15
MW-14	Vinyl Chloride	75-01-4	ug/L	1/25/2017	0.02		0.14
MW-14	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02		0.1
SW-1	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0016
SW-1	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00144
SW-1	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.00148
SW-1	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.00155
SW-1	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00146
SW-1	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.00155
SW-1	Arsenic	7440-38-2	mg/L	4/4/2013	4.00E-05		0.00145
SW-1	Arsenic	7440-38-2	mg/L	7/11/2013	4.00E-05		0.0013
SW-1	Arsenic	7440-38-2	mg/L	10/3/2013	0.0002		0.0017
SW-1	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00131
SW-1	Arsenic	7440-38-2	mg/L	10/8/2014	8.00E-05		0.00094
SW-1	Arsenic	7440-38-2	mg/L	1/21/2015	4.00E-05		0.00143
SW-1	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.00079
SW-1	Arsenic	7440-38-2	mg/L	7/8/2015	4.00E-05		0.00082
SW-1	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0014
SW-1	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0014
SW-1	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0008
SW-1	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.00079
SW-1	Arsenic	7440-38-2	mg/L	10/20/2016	8.00E-05		0.00173
SW-1	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.00145
SW-1	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	7/11/2013	0.02		0.032
SW-1	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02	ND	

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
SW-1	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	10/8/2014	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	1/21/2015	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	7/8/2015	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	1/26/2017	0.02	ND	
SW-1	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02	ND	
SW-4	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0019
SW-4	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00156
SW-4	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.00163
SW-4	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.00147
SW-4	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00176
SW-4	Arsenic	7440-38-2	mg/L	1/3/2013	8.00E-05		0.00176
SW-4	Arsenic	7440-38-2	mg/L	4/4/2013	0.0002		0.0018
SW-4	Arsenic	7440-38-2	mg/L	7/11/2013	4.00E-05		0.00157
SW-4	Arsenic	7440-38-2	mg/L	10/3/2013	0.0002		0.0026
SW-4	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00151
SW-4	Arsenic	7440-38-2	mg/L	10/8/2014	8.00E-05		0.00188
SW-4	Arsenic	7440-38-2	mg/L	1/21/2015	4.00E-05		0.00166
SW-4	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.00176
SW-4	Arsenic	7440-38-2	mg/L	7/8/2015	4.00E-05		0.00165
SW-4	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0018
SW-4	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0015
SW-4	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0015
SW-4	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.00162
SW-4	Arsenic	7440-38-2	mg/L	10/20/2016	0.0004		0.00254
SW-4	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.00185
SW-4	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02	J	0.004
SW-4	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02	J	0.0091
SW-4	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02	J	0.0089
SW-4	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02	J	0.0042
SW-4	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02	J	0.0092
SW-4	Vinyl Chloride	75-01-4	ug/L	7/11/2013	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	10/8/2014	0.02	ND	

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
SW-4	Vinyl Chloride	75-01-4	ug/L	1/21/2015	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	7/8/2015	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	1/26/2017	0.02	ND	
SW-4	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02	ND	
SW-6	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0044
SW-6	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00134
SW-6	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.0032
SW-6	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.00319
SW-6	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00216
SW-6	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.00168
SW-6	Arsenic	7440-38-2	mg/L	4/4/2013	4.00E-05		0.00206
SW-6	Arsenic	7440-38-2	mg/L	7/11/2013	4.00E-05		0.0042
SW-6	Arsenic	7440-38-2	mg/L	10/3/2013	0.0002		0.0031
SW-6	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.00136
SW-6	Arsenic	7440-38-2	mg/L	10/8/2014	4.00E-05		0.00246
SW-6	Arsenic	7440-38-2	mg/L	1/21/2015	8.00E-05		0.00167
SW-6	Arsenic	7440-38-2	mg/L	4/16/2015	0.0002		0.0022
SW-6	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0034
SW-6	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0018
SW-6	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.0022
SW-6	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.00713
SW-6	Arsenic	7440-38-2	mg/L	10/20/2016	0.0004		0.00326
SW-6	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.00233
SW-6	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02	J	0.009
SW-6	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02	J	0.0046
SW-6	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	7/11/2013	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	10/8/2014	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	1/21/2015	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02	ND	

Table C-2. Statistical Dataset

Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
SW-6	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	1/26/2017	0.02	ND	
SW-6	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02	ND	
SW-7	Arsenic	7440-38-2	mg/L	10/4/2011	0.0002		0.0018
SW-7	Arsenic	7440-38-2	mg/L	1/31/2012	8.00E-05		0.00092
SW-7	Arsenic	7440-38-2	mg/L	4/19/2012	8.00E-05		0.0011
SW-7	Arsenic	7440-38-2	mg/L	7/5/2012	0.0002		0.00144
SW-7	Arsenic	7440-38-2	mg/L	10/2/2012	4.00E-05		0.00141
SW-7	Arsenic	7440-38-2	mg/L	1/3/2013	4.00E-05		0.0008
SW-7	Arsenic	7440-38-2	mg/L	4/4/2013	4.00E-05		0.00119
SW-7	Arsenic	7440-38-2	mg/L	7/11/2013	4.00E-05		0.0014
SW-7	Arsenic	7440-38-2	mg/L	10/3/2013	0.0002		0.0016
SW-7	Arsenic	7440-38-2	mg/L	1/16/2014	4.00E-05		0.0009
SW-7	Arsenic	7440-38-2	mg/L	10/8/2014	4.00E-05		0.00176
SW-7	Arsenic	7440-38-2	mg/L	1/21/2015	4.00E-05		0.001
SW-7	Arsenic	7440-38-2	mg/L	4/16/2015	4.00E-05		0.0011
SW-7	Arsenic	7440-38-2	mg/L	7/8/2015	4.00E-05		0.00184
SW-7	Arsenic	7440-38-2	mg/L	10/21/2015	0.0001		0.0019
SW-7	Arsenic	7440-38-2	mg/L	1/6/2016	0.0001		0.0011
SW-7	Arsenic	7440-38-2	mg/L	4/5/2016	0.0001		0.001
SW-7	Arsenic	7440-38-2	mg/L	7/12/2016	4.00E-05		0.0018
SW-7	Arsenic	7440-38-2	mg/L	10/20/2016	0.0004		0.00145
SW-7	Arsenic	7440-38-2	mg/L	4/11/2017	0.00004		0.000937
SW-7	Vinyl Chloride	75-01-4	ug/L	10/4/2011	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	1/31/2012	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	4/19/2012	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	7/5/2012	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	10/2/2012	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	1/3/2013	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	4/4/2013	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	7/11/2013	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	10/3/2013	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	1/16/2014	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	4/17/2014	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	10/8/2014	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	1/21/2015	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	4/16/2015	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	7/8/2015	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	10/21/2015	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	1/6/2016	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	4/5/2016	0.02	ND	

Table C-2. Statistical Dataset

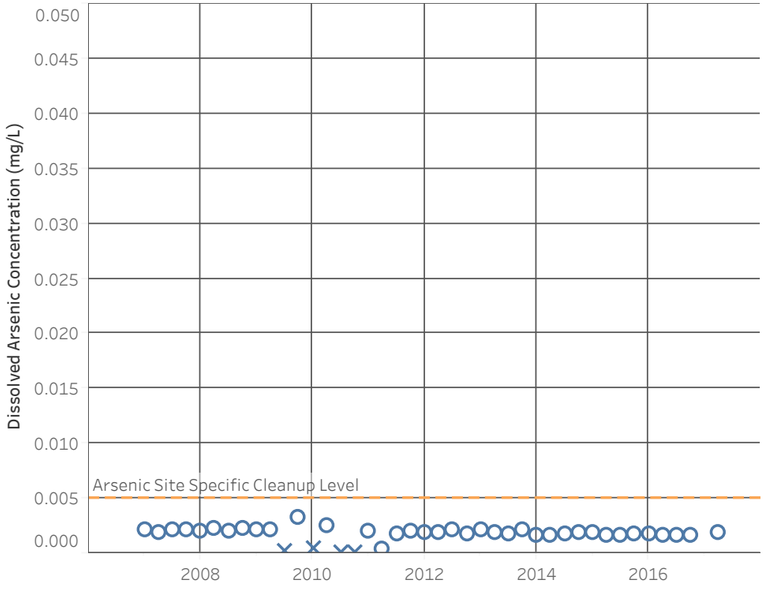
Project 160423, Hansville Landfill, Hansville, WA

Location	Constituent	CAS	Units	Date	Reporting Limit	Flags	Result
SW-7	Vinyl Chloride	75-01-4	ug/L	7/12/2016	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	10/20/2016	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	1/26/2017	0.02	ND	
SW-7	Vinyl Chloride	75-01-4	ug/L	4/11/2017	0.02	ND	

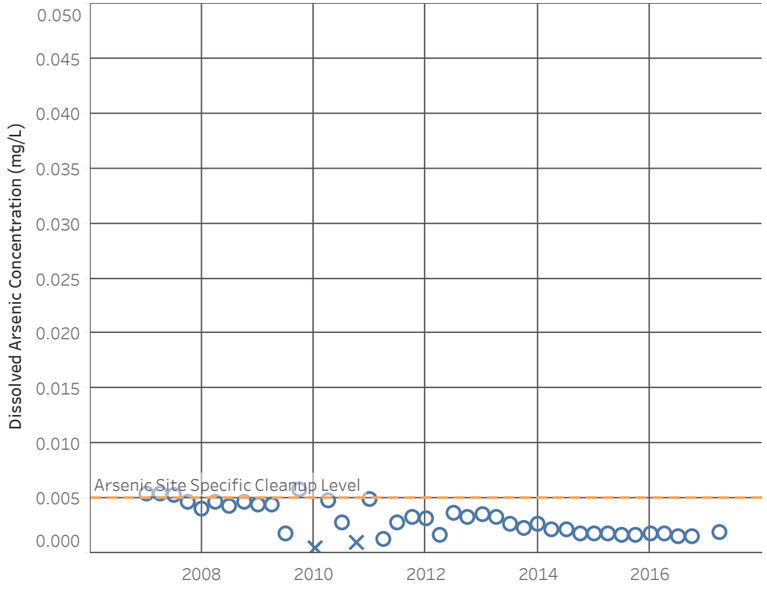
Notes:
n/a = not applicable
ND = non detect
J - Estimated "usable"
mg/L - milligram per liter
ug/L - microgram per liter

FIGURES

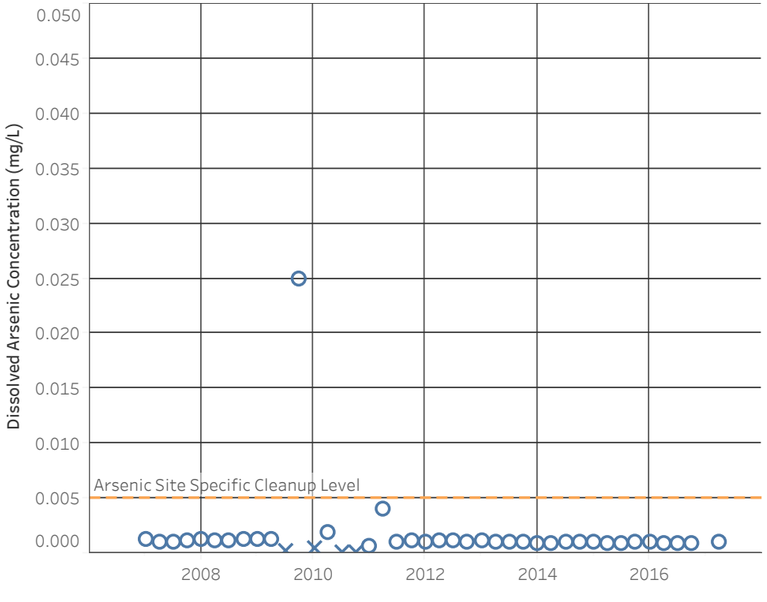
MW-5 (Background Well)



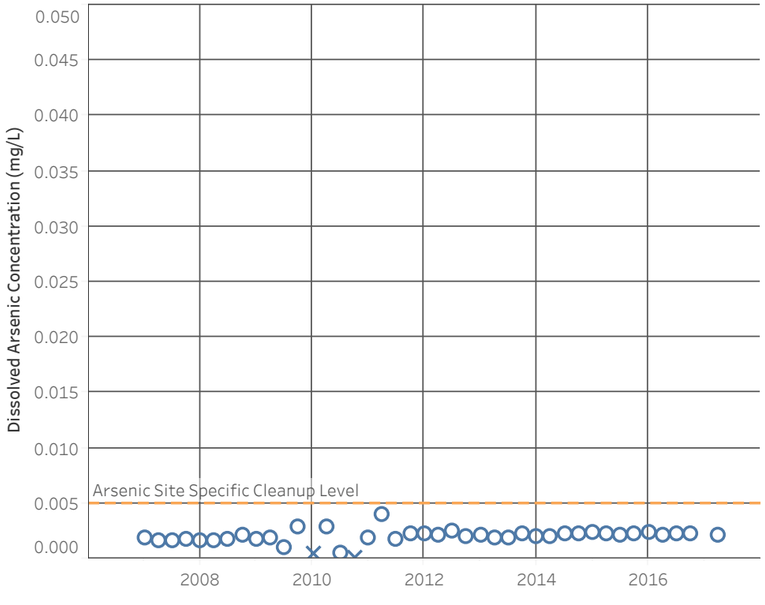
MW-6



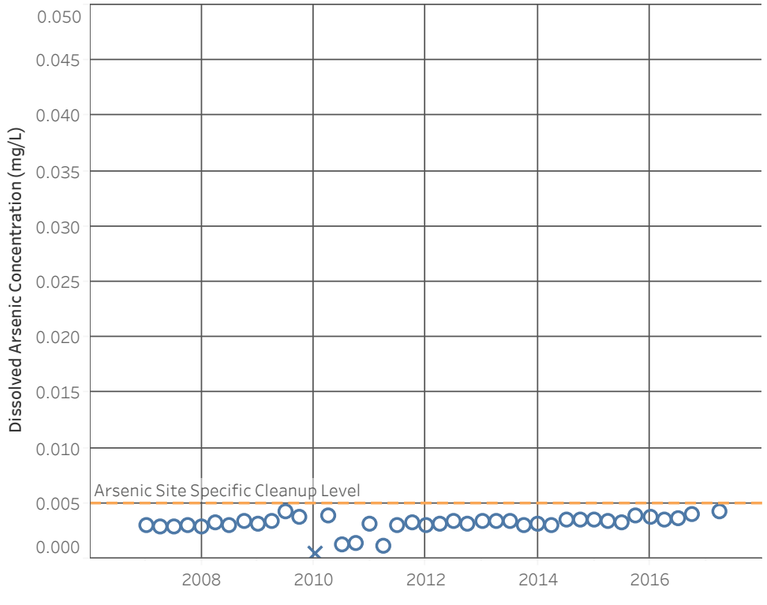
MW-7



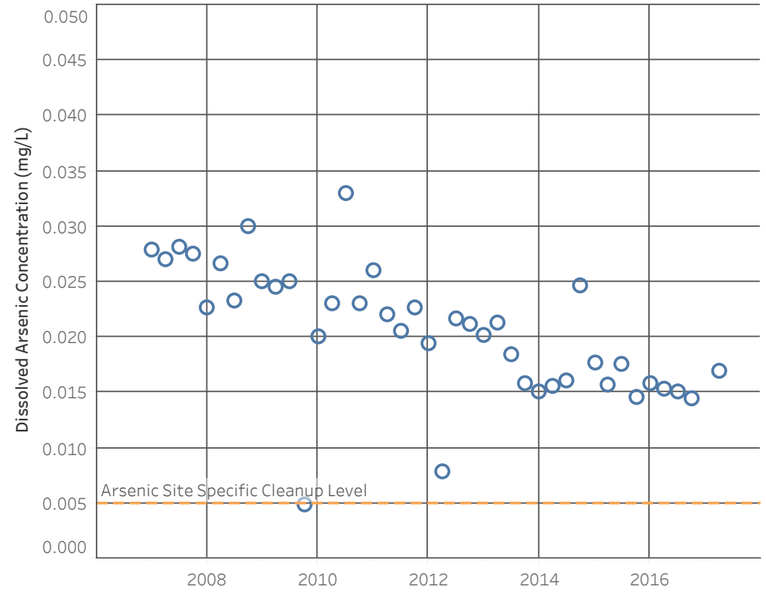
MW-12I



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
O Detected
✕ U - Non-Detect

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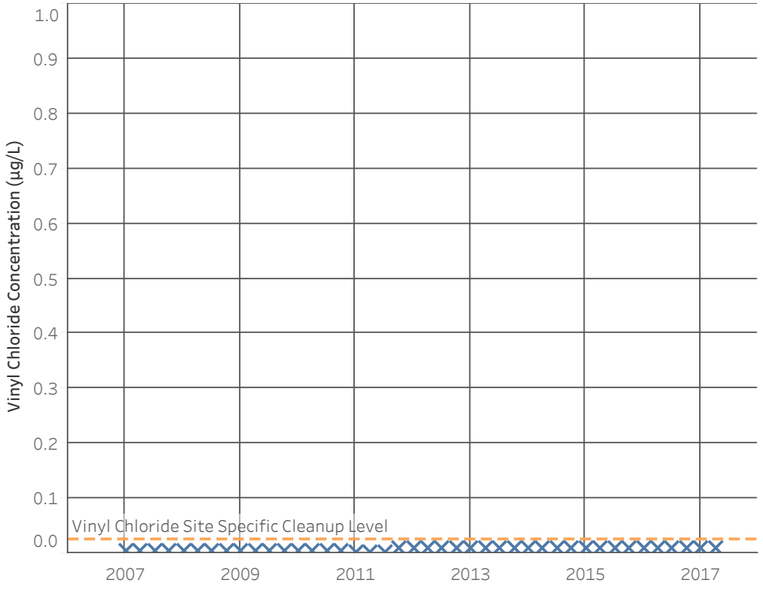
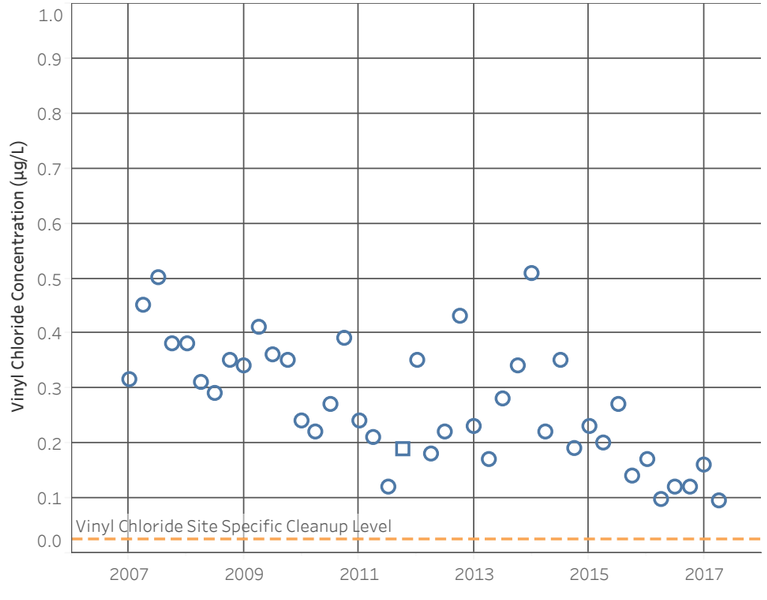
07/31/2017
Trend Plots (As)

Figure C-1 - Dissolved Arsenic Sampling Results
Second Quarter 2017 Environmental Monitoring Report
Hansville Landfill
Kitsap County, WA

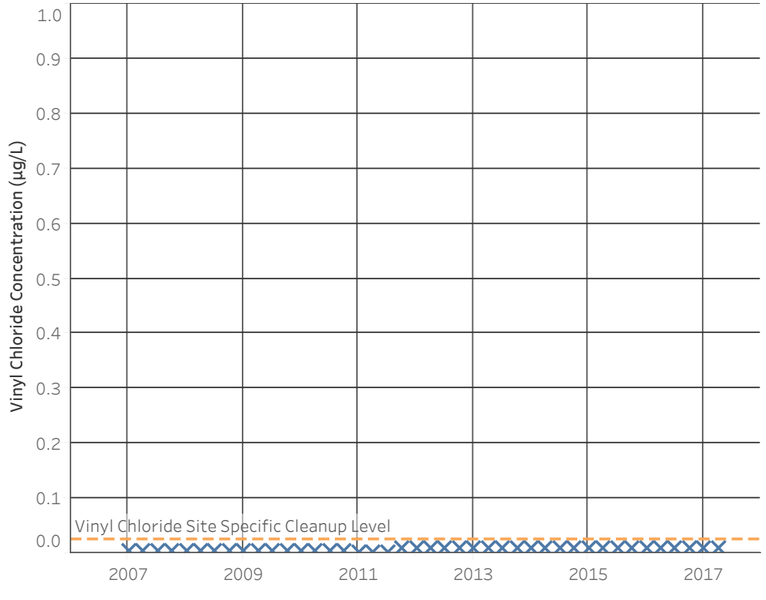
MW-5 (Background Well)



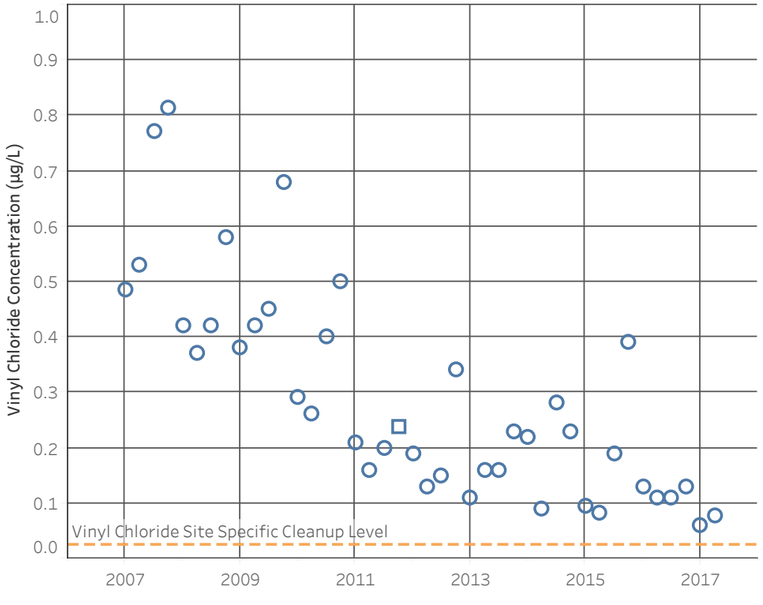
MW-6



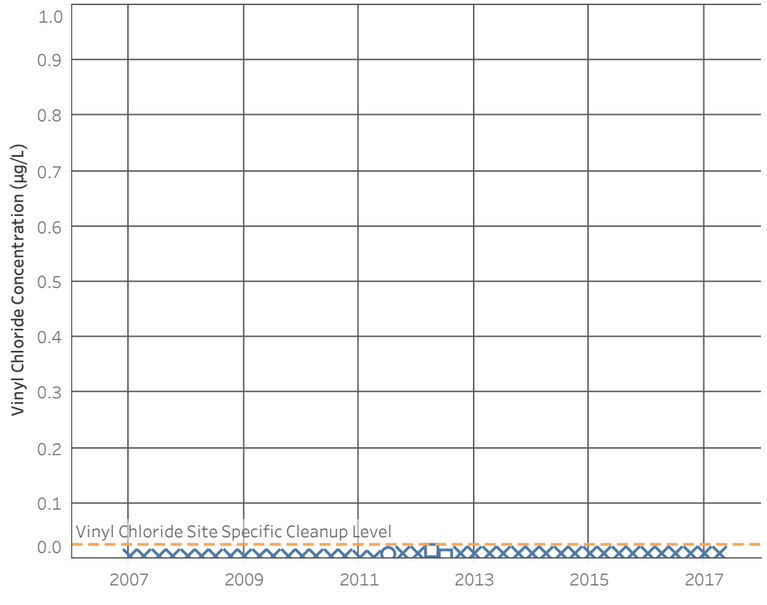
MW-7



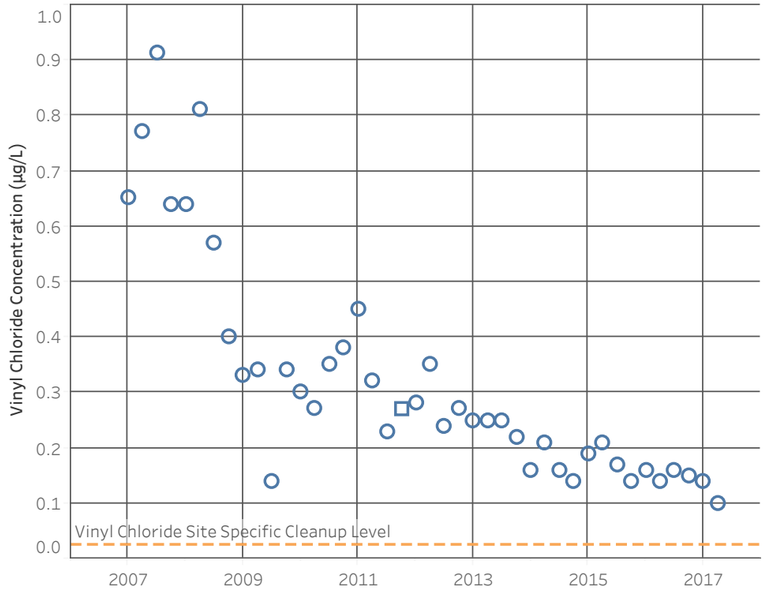
MW-12I



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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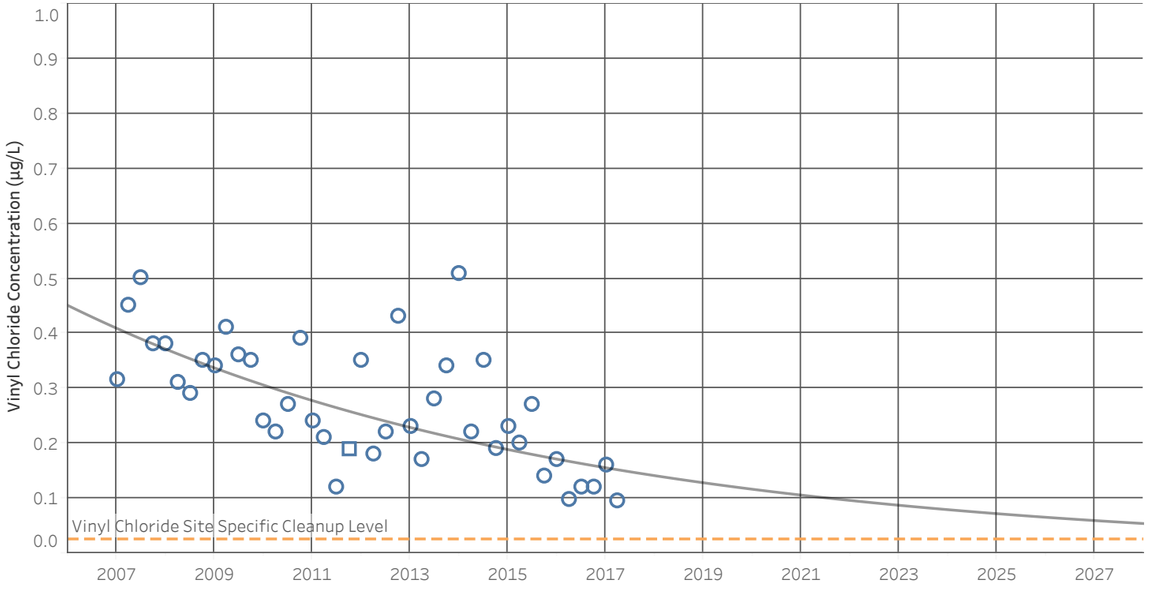
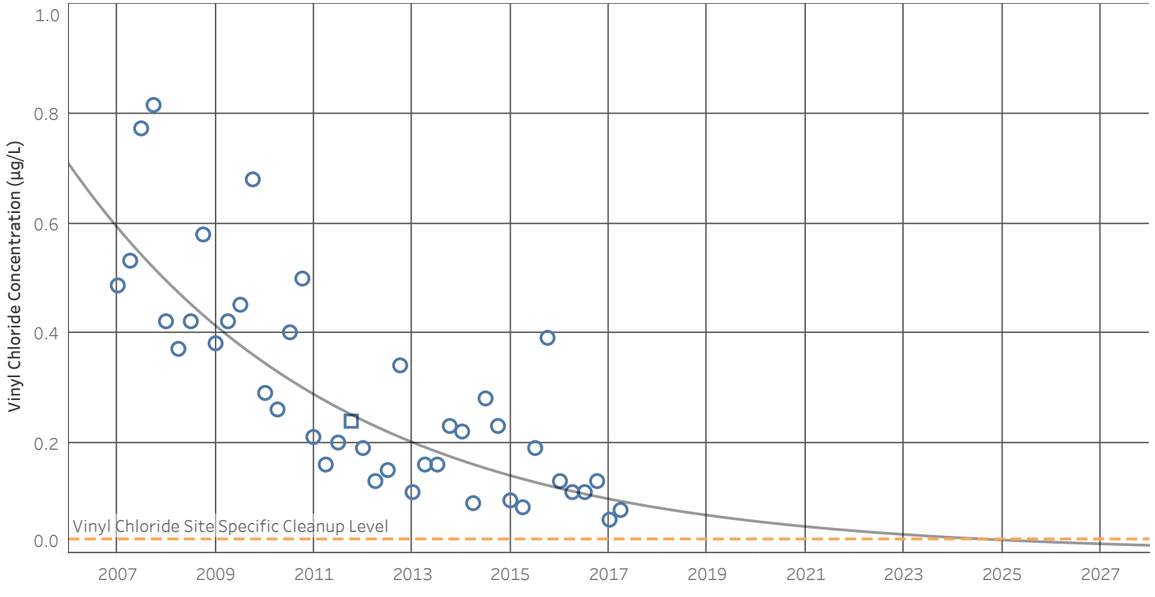
07/31/2017
Trend Plots (VC)

Figure C-2 - Vinyl Chloride Sampling Results
Second Quarter 2017 Environmental Monitoring Report
Hansville Landfill
Kitsap County, WA

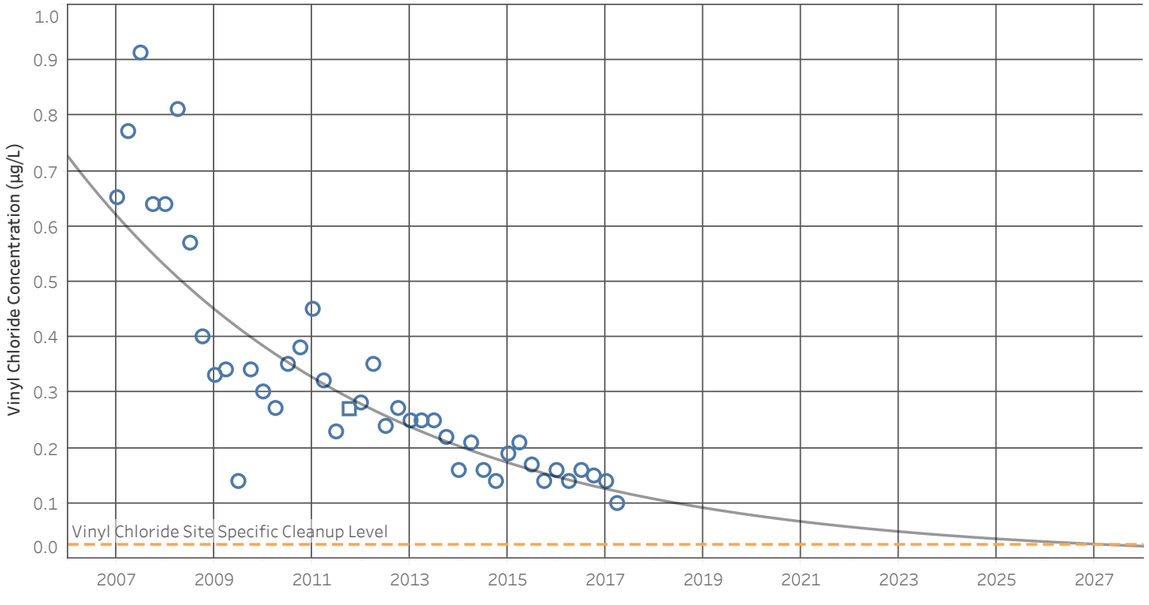
MW-6 Vinyl Chloride Trend



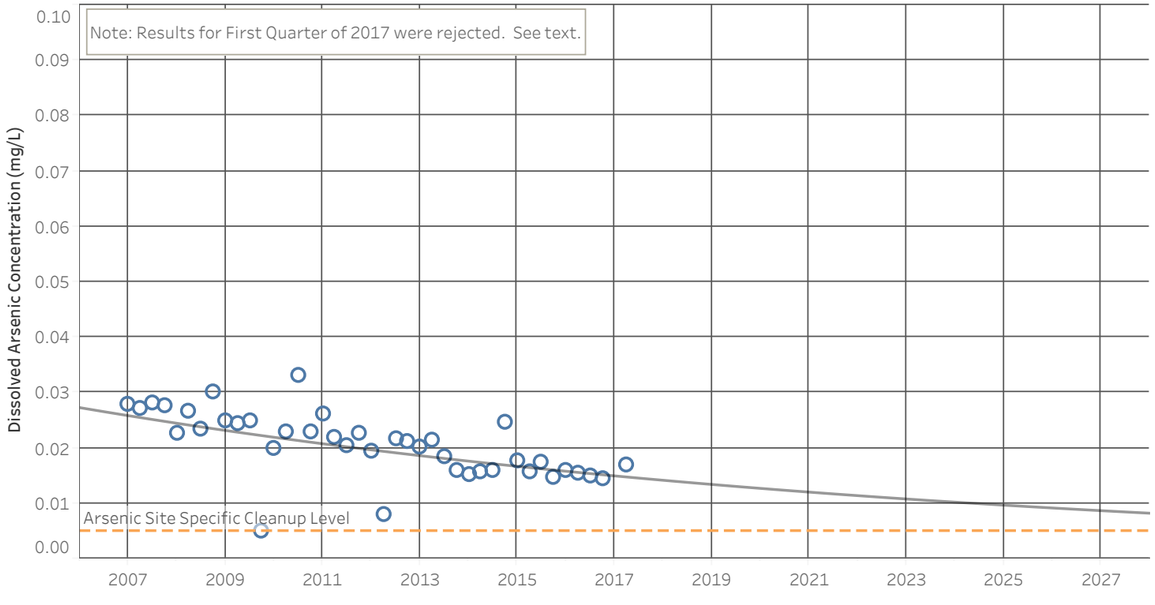
MW-12I Vinyl Chloride Trend



MW-14 Vinyl Chloride 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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Aspect Consulting
07/31/2017
Trend Plots (VC)

Figure C-3 - 10 Year Attenuation Curves
Second Quarter 2017 Environmental Monitoring Report
Hansville Landfill
Kitsap County, WA

ATTACHMENT D

Field Forms and Laboratory Reports

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-6 Page: 1 of 1

Project Name: Hansville CF

Project Number:

Date: 4/11/17

Developed by:

Measuring Point of Well:

Screened Interval (ft. TOC)

Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC): 73.18

Casing Stickup (ft):

Total Depth (ft TOC):

Casing Diameter (inches): 2

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)

Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf

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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
1705		0.5								start
1710			73.42	12.9	388.9	0.35	6.92	262	0.65	
1715			73.46	15.0	390.7	0.46	7.10	15.5	0.78	
1720			73.48	15.7	395.2	0.46	7.11	14.7	0.68	
1723			73.58	15.9	399.7	0.46	7.09	15.7	0.86	sample

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1725									

METHODS

Sampling Equipment with IDs: _____

Purging Equipment: _____ Decon Equipment: _____

Disposal of Discharged Water: _____

Observations/Comments: _____

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-11 Page: ___ of ___

Project Name: Hamilton LF
Project Number:
Date: 4/11/17
Developed by:
Measuring Point of Well:
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC): 80.46
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches):

Casing Volume ___ (ft Water) x ___ (Lpfv)(gpf) = ___ (L)(gal)
Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
1601	—	0.5Lpm								start
1606			80.60	11.7	300.1	0.66	6.95	63.1	2.56	
1612			80.65	13.6	301.2	0.69	6.89	41.2	1.08	
1617			80.60	14.4	301.8	0.56	6.94	29.6	0.61	
1622			80.68	14.7	301.9	0.49	6.94	21.7	0.97	
1627			80.60	14.8	302.5	0.46	6.94	18.3	0.99	
1630				14.9	302.5	0.43	6.94	14.7	0.97	sample

Total Gallons Purged: ___ Total Casing Volumes Removed: ___

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1635	1L	Poly		1	—	—			
	500mL	Amb		1	—	Sulf			
	40mL	VOA		3	—	HCl			
	500mL	Poly		2	Y	HNO_3			
	250mL	Poly		1	Y	—			
1645									FIELD Dup "MW-20"

METHODS

Sampling Equipment with IDs:
Purging Equipment: Decon Equipment:
Disposal of Discharged Water:
Observations/Comments:

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-130 **Page:** 1 of 1

Project Name: Hanville LF
Project Number:
Date: 4/11/19
Developed by:
Measuring Point of Well:
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC): 9.99
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches):

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
1330		0.5								Start
1335			10.53	10.2	195.4	0.73	7.33	76.3	0.97	
1340			10.53	10.4	197.3	0.44	7.37	72.3	0.24	
1345			10.53	10.6	199.8	0.33	7.45	66.5	0.20	
1350				10.6	198.0	0.26	7.49	62.4	0.26	
1353				10.7	198.1	0.23	7.49	60.9	0.16	
1356				10.7	198.2	0.22	7.50	59.4	0.18	
1400				10.7	198.3	0.19	7.50	57.5	2.20	sample

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1405	1L	poly		1	-	-			
	60mL	amb		1	-	salt			
	40mL	VOA		3	-	HCl			
	500mL	poly		2	Y	HNO3			
	250mL	poly		1	Y	-			

METHODS

Sampling Equipment with IDs: YSI blue
Purging Equipment: Redflo Decon Equipment: Alconox + water
Disposal of Discharged Water:
Observations/Comments:

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SW-7 Page: 1 of 1

Project Name: Hansville LF
Project Number:
Date: 4/11/17
Developed by:
Measuring Point of Well:
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: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
1506				8.6	102.3	12.17	7.48	48.5	3.07	

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1506	1L	Poly		1	—	—			
	500mL	Amb		1	—	Sulf			
	40mL	VOA		3	—	HCl			
	500mL	Poly		2	Y	HNO3			
	250mL	Poly		1	Y	—			

METHODS

Sampling Equipment with IDs:
Purging Equipment: Decon Equipment:
Disposal of Discharged Water:
Observations/Comments: Surface Water

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SLJ-G Page: 1 of 1

Project Name: Hansville LF
Project Number:
Date: 4/11/17
Developed by:
Measuring Point of Well:
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: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
				8.6	88.2	10.91	7.24	57.7	3.55	

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1245	1L	Poly		1	-	-			
	500mL	Amb		1	-	H_2SO_4			
	40mL	VOA		3	-	HCl			
	500mL	Poly		2	Y	HNO_3			
	250mL	Poly		1	Y	-			

METHODS

Sampling Equipment with IDs: YSI Blue
Purging Equipment: Decon Equipment:
Disposal of Discharged Water:
Observations/Comments:

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SW-4 Page:___ of ___

Project Name: Ramsey Hill LF
Project Number:
Date: 4/11/17
Developed by:
Measuring Point of Well:
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: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
				8.6	259.5	11.02	7.40	75.3	3.50	

Total Gallons Purged: ___ Total Casing Volumes Removed: ___

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1225	1 L	Poly		1	~~Y~~	—			
	500 mL	Amb		1	~~Y~~	~~Sulf~~			
	40 mL	VOA		3	~~Y~~	HCl			
	500 mL	Poly		2	~~Y~~ Y	HNO3			
	250 mL	Poly		1	~~Y~~ Y	—			

METHODS

Sampling Equipment with IDs: YSI Bluy
Purging Equipment: Decon Equipment:
Disposal of Discharged Water:
Observations/Comments:

Aspect CONSULTING

GW

GROUNDWATER SAMPLING RECORD

WELL NUMBER: SW-1 Page:___ of ___

Project Name: Hansville LF Project Number:

Date: 4/11/17

Developed by:

Measuring Point of Well:

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: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf

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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
				5.2	156.7	10.55	7.41	49.5	1.60	

Total Gallons Purged: ___ Total Casing Volumes Removed: ___

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1145	1 L	Poly		1	—	—			
	500mL	Amb		1	—	Solf			
	40 mL	VOA		3	—	HCl			
	500mL	Poly		2	Y	HNO3			
	250mL	Poly		1	Y	—			

METHODS

Sampling Equipment with IDs: YSI Blank

Purging Equipment: — N/A Decon Equipment: ___

Disposal of Discharged Water: ___

Observations/Comments: ___

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

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

Project Name: Hanville LF

Project Number:

Date: 4/11/17

Developed by:

Measuring Point of Well:

Screened Interval (ft. TOC)

Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC): 9.33

Casing Stickup (ft):

Total Depth (ft TOC):

Casing Diameter (inches): 2

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)

Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf

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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
1109		0.4								start
1114			9.40	9.6	160.5	3.22	7.01	59.8	0.40	
1119			9.40	9.8	164.6	1.93	7.09	54.7	1.02	
1124			same	10.1	165.6	1.42	7.14	51.0	0.71	
1129				10.1	165.8	1.26	7.15	50.4	1.16	
1132				10.2	166.2	1.18	7.16	50.2	.58	
1135				10.2	166.5	1.09	7.15	50.1	1.13	
1138				10.3	166.5	1.00	7.14	50.1	0.83	
1141				10.3	169.0	0.97	7.15	49.8	0.68	sample

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1145	1L	poly		1	—	—			Alk, Cl, NO3/NO2, SO4
	500mL	amb		1	—	surf			Amm, TOC
	40mL	VOA		3	—	HCl			VC
	50mL	poly		2	Y	HNO_3			D's metal/dis. arsenic
	250mL	poly		1	Y	—			o-phos

METHODS

Sampling Equipment with IDs: YSI Blue

Purging Equipment: Redi Flow Decon Equipment: Alconox + water

Disposal of Discharged Water:

Observations/Comments:

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-5 Page: 1 of 1

Project Name: Hanville LF
Project Number:
Date: 4/11/2017
Developed by:
Measuring Point of Well:
Screened Interval (ft. TOC)
Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC): 99.20
Casing Stickup (ft):
Total Depth (ft TOC):
Casing Diameter (inches): 2

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)
Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf
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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
0951		0.5								Start
0956			99.22	9.8	131.8	9.53	7.16	45.2	.57	
1001			99.22	10.1	148.6	9.51	7.17	43.7	.29	
1006			99.0	10.8	147.9	9.33	7.19	41.7	.26	
1011			—	11.5	147.6	9.17	7.20	41.7	.28	

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
1015	1L	Poly		1	—	—			Alk, Cl, NO3/NO2, SO4
	500mL	Amb		1	—	Sulf			Amm, TOC
	40mL	VOA		3	—	HCl			VC
	500mL	Amb	F	2	Y	HNO3			Dis. Metal, Dis. Arsenic
	250mL	Poly		1	Y	—			o-phos

METHODS

Sampling Equipment with IDs: YSI Pump
Purging Equipment: Red Flo Decon Equipment: Alconox + Water
Disposal of Discharged Water:
Observations/Comments: VFD = 217

Aspect CONSULTING

GROUNDWATER SAMPLING RECORD

WELL NUMBER: MW-7 Page: 1 of 1

Project Name: Hansville LF Project Number: 160423

Date: 4/11/17

Developed by:

Measuring Point of Well:

Screened Interval (ft. TOC)

Filter Pack Interval (ft. TOC)

Starting Water Level (ft TOC): 84.13

Casing Stickup (ft):

Total Depth (ft TOC):

Casing Diameter (inches): 2

Casing Volume _____ (ft Water) x _____ (Lpfv)(gpf) = _____ (L)(gal)

Casing volumes: 2" = 0.16 gpf 4" = 0.65 gpf 6" = 1.47 gpf

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 and minimal and	na	± 3%	± 10%	± 0.1	± 10 mV	± 10%	
Time	Cumul. Volume (gal or L)	Purge Rate (gpm or Lpm)	Water Level (ft)	Temp. (C or F)	Specific Conductivity (µS/cm)	Dissolved Oxygen (mg/L)	pH	Eh ORP (mv)	Turbidity (NTU)	Comments
0823		0.5	84.4							start
0830			~~85.50~~	9.9	309.9	1.90	6.69	72.4	.89	
0835			89.9	11.3	304.2	1.86	6.73	63.1	.46	
0845			88.83	12.3	299.3	1.84	6.76	53.2	0.45	
0849			88.00	12.3	299.0	1.84	6.76	50.6	0.58	
0852	4 Gal		88.00	12.5	298.3	1.86	6.75	48.9	0.85	Sample

Total Gallons Purged: _____ Total Casing Volumes Removed: _____

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

SAMPLE INVENTORY

Time	Volume	Bottle Type		Quantity	Filtration	Preservation	Appearance		Remarks
							Color	Turbidity & Sediment	
0855	40mL	VOA		3	N	HCl			VC,
|	1000mL	Poly		1	N	—			
|	500 mL	Amb		1	N	SulF			Ammon, TOC
|	500mL	Poly		2	Y	HNO_3			Diss. Mn, Dis. Arsenic
|	250mL	Poly		1	Y	—			ortho-P

METHODS

Sampling Equipment with IDs: Red. Flo. VSE-3 Imp

Purging Equipment: ↓ Decon Equipment: Alconox + water

Disposal of Discharged Water: on site

Observations/Comments: VFD = 199 Hz for 0.5 Lpm

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact:	Phone:	Sara, Betsy A E-Mail: betsy.sara@testamericainc.com		280-23414-6845.1 Page:

Company: Aspect Consulting, LLC

Address: 350 Madison Ave N
City: Bainbridge Island
State, Zip: WA, 98110
Phone:
Email:

Due Date Requested:
TAT Requested (days):
PO #: Purchase Order not required
WO #:
Project #:skip sites/events: 28006013 - 2Q/3Q/4Q Sampling
SSOW#:

Project Name: Hansville Landfill
Site: Washington

Job #: 160453

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 - Na2S2SO3
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	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/NO3/NO3(IC)	Ortho-phosphate (field filtered)	Dissolved Arsenice (Direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	K	A	D	S	N	N	D	X	
MW-7	4/11/17	0955		W	Y		X	X	X	X	X	X		Short Holds: NO3/NO2(IC), Orthophosphate (IC)
MW-5		1015		W	Y		X	X	X	X	X	X		
MW-12I		1145		W	Y		X	X	X	X	X	X		Dissolved Arsenic subbed direct to ARI
SW-1		1145		W	Y		X	X	X	X	X	X		
SW-4		1335		W	Y		X	X	X	X	X	X		
SW-6		1345		W	Y		X	X	X	X	X	X		2 of 6 Trip Blanks
SW-7		1500		W	Y		X	X	X	X	X	X		broke in delivery
MW-13D		1405		W	Y		X	X	X	X	X	X		
MW-14		1435		W	Y		X	X	X	X	X	X		
MW-20D		1545		W	Y		X	X	X	X	X	X		
MW-6		1725		W	Y		X	X	X	X	X	X		

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	[signature]	4/12/17 0900	[illegible]			
2						
3						

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

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Aaron Pavill	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-23414-6845.1
Client Contact:	Phone: 206 595-6603	E-Mail: betsy.sara@testamericainc.com		Page: 1/1
Company: Aspect Consulting, LLC				Job #: 160423
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:	WO #:			
Project Name: Hansville Landfill	Project #:skip sites/events 28006013 - 2Q/3Q/4Q Sampling			
Site: Washington	SSOW#:			

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/NO3/NO3(IC)	Ortho-phosphate (field filtered)	Dissolved Arsenice (Direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code		N	N	A	D	S	N	N	D		
MW-3	9/11/17	0825		W	N	N						X		Short Holds: NO3/NO2(IC), Orthophosphate (IC)
MW-5		1015		W	N	N						X		
MW-12T		1145		W	N	N						X		Dissolved Arsenic subbed direct to ARI
SW-1		1145		W	N	N						X		
SW-2		1320		W	N	N						X		
SW-6		1245		W	N	N						X		
SW-7		1560		W	N	N						X		
MW-13D		1405		W	N	N						X		
MW-14		1635		W	N	N						X		
MW-20D		1645		W	N	N						X		
MW-6		1725		W	N	N						X		

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:

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 - Na2S2SO3
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:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Aaron Pavill	9/12/17 11:30			9/12/2017 11:30	ATI
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:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-95855-1

Job Description: Hansville Landfill

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

Attention: Mr. Aaron Pruitt

Approved for release.
Betsy A Sara
Project Manager II
4/26/2017 3:15 PM

Betsy A Sara, Project Manager II
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0189
betsy.sara@testamericainc.com
04/26/2017

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

Table of Contents

CASE NARRATIVE

Client: Aspect Consulting

Project: Hansville Landfill

Report Number: 280-95855-1

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.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Sample Receiving

The samples were received on 04/13/2017; the samples arrived in good condition and properly preserved.

The coolers arrived at elevated temperatures of 7.2 C, 10.6 C and 6.6 C. This is above the recommended maximum temperature of 6.0 C. The ice was melted. The laboratory proceeded with the requested analyses. The client was notified.

Holding Times

The analyses for Nitrate, Nitrite and Ortho-phosphate for the samples MW-7 and MW-5 were performed outside of hold due to more than half of the hold time or all holding time expiring during transit. It is TestAmerica's policy to analyze all samples within holding times, but when samples are received with less than half the hold time remaining, this can not be guaranteed. The client was notified.

All other 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)

Sample MW-7 was selected to fulfill the laboratory batch quality control requirements for Method 350.1. Analysis of the laboratory generated MS/MSD for this sample exhibited recoveries of Ammonia above the upper control limit. In addition, the RPD result was outside the RPD limit for Ammonia. Because the corresponding Laboratory Control Sample and the Method Blank sample were within control limits, this anomaly may be due to matrix interference and no corrective action was taken.

All other MS and MSD samples were within established control limits.

Organics

The analyte 2-chloroethyl vinyl ether cannot be reliably quantitated in acid preserved samples, therefore, the reporting limit for the analyte 2-chloroethyl vinyl ether is not reliable or defensible.

General Comments

The analysis for Method 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 Dissolved Arsenic Method 200.8 was performed by ARI. Their address and phone number are:
Analytical Resources, Inc.
4611 S.134th Place

Tukwila, WA 98168-3240
206-695-6200

EXECUTIVE SUMMARY - Detections

Client: Aspect Consulting Job Number: 280-95855-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-95855-1	**MW-7**					
Chloride		1.8		1.0	mg/L	300.0
Nitrate		0.60	H	0.50	mg/L	300.0
Sulfate		5.0		1.0	mg/L	300.0
Total Alkalinity		160		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		160		5.0	mg/L	SM 2320B
Total Organic Carbon - Average		1.4		1.0	mg/L	SM 5310B
280-95855-2	**MW-5**					
Chloride		2.8		1.0	mg/L	300.0
Nitrate		1.2	H	0.50	mg/L	300.0
Sulfate		8.8		1.0	mg/L	300.0
Total Alkalinity		60		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		60		5.0	mg/L	SM 2320B
280-95855-3	**MW-12I**					
Vinyl chloride		0.077		0.020	ug/L	8260C SIM
Chloride		3.3		1.0	mg/L	300.0
Sulfate		5.8		1.0	mg/L	300.0
Total Alkalinity		83		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		83		5.0	mg/L	SM 2320B
Total Organic Carbon - Average		2.4		1.0	mg/L	SM 5310B
Dissolved						
Manganese		54		1.0	ug/L	6020
280-95855-4	**SW-1**					
Chloride		4.5		1.0	mg/L	300.0
Nitrate		1.6		0.50	mg/L	300.0
Sulfate		11		1.0	mg/L	300.0
Total Alkalinity		73		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		73		5.0	mg/L	SM 2320B
Total Organic Carbon - Average		2.9		1.0	mg/L	SM 5310B
Dissolved						
Manganese		1.9		1.0	ug/L	6020

EXECUTIVE SUMMARY - Detections

Client: Aspect Consulting Job Number: 280-95855-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-95855-5	**SW-4**					
Chloride		11		1.0	mg/L	300.0
Nitrate		1.0		0.50	mg/L	300.0
Sulfate		16		1.0	mg/L	300.0
Total Alkalinity		120		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		120		5.0	mg/L	SM 2320B
Total Organic Carbon - Average		11		1.0	mg/L	SM 5310B
Dissolved						
Manganese		38		1.0	ug/L	6020
280-95855-6	**SW-6**					
Chloride		3.1		1.0	mg/L	300.0
Sulfate		5.2		1.0	mg/L	300.0
Total Alkalinity		34		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		34		5.0	mg/L	SM 2320B
Total Organic Carbon - Average		19		1.0	mg/L	SM 5310B
Dissolved						
Manganese		26		1.0	ug/L	6020
280-95855-7	**SW-7**					
Chloride		3.1		1.0	mg/L	300.0
Nitrate		1.6		0.50	mg/L	300.0
Sulfate		6.5		1.0	mg/L	300.0
Total Alkalinity		35		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		35		5.0	mg/L	SM 2320B
Total Organic Carbon - Average		10		1.0	mg/L	SM 5310B
Dissolved						
Manganese		3.7		1.0	ug/L	6020
280-95855-8	**MW-13D**					
Chloride		6.2		1.0	mg/L	300.0
Sulfate		18		1.0	mg/L	300.0
Total Alkalinity		77		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		77		5.0	mg/L	SM 2320B
Dissolved						
Manganese		26		1.0	ug/L	6020

EXECUTIVE SUMMARY - Detections

Client: Aspect Consulting Job Number: 280-95855-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
280-95855-9	**MW-14**					
Vinyl chloride		0.10		0.020	ug/L	8260C SIM
Chloride		8.7		1.0	mg/L	300.0
Sulfate		20		1.0	mg/L	300.0
Total Alkalinity		140		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		140		5.0	mg/L	SM 2320B
Dissolved						
Manganese		2600		1.0	ug/L	6020
280-95855-10	**MW-20D**					
Vinyl chloride		0.097		0.020	ug/L	8260C SIM
Chloride		8.7		1.0	mg/L	300.0
Sulfate		20		1.0	mg/L	300.0
Total Alkalinity		130		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		130		5.0	mg/L	SM 2320B
Dissolved						
Manganese		2700		1.0	ug/L	6020
280-95855-11	**MW-6**					
Vinyl chloride		0.096		0.020	ug/L	8260C SIM
Chloride		9.3		1.0	mg/L	300.0
Nitrate		1.4		0.50	mg/L	300.0
Sulfate		28		1.0	mg/L	300.0
Ammonia as N		0.096		0.030	mg/L	350.1
Total Alkalinity		170		5.0	mg/L	SM 2320B
Bicarbonate Alkalinity		170		5.0	mg/L	SM 2320B
Total Organic Carbon - Average		1.4		1.0	mg/L	SM 5310B
Dissolved						
Manganese		480		1.0	ug/L	6020

METHOD SUMMARY

Client: Aspect Consulting Job Number: 280-95855-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP/MS)	TAL DEN	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL DEN		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Anions, Ion Chromatography	TAL DEN	MCAWW 300.0	
Anions, Ion Chromatography	TAL DEN	MCAWW 300.0	
Sample Filtration, Field			FIELD_FLTRD
Nitrogen, Ammonia	TAL DEN	MCAWW 350.1	
Alkalinity	TAL DEN	SM SM 2320B	
Organic Carbon, Total (TOC)	TAL DEN	SM SM 5310B	
Volatile Organic Compounds (GC/MS)	TAL BUF	SW846 8260C SIM	
Purge and Trap	TAL BUF		SW846 5030C
General Sub Contract Method	SC0056	Subcontract	

Lab References:

SC0056 = Analytical Resources, Inc

TAL BUF = TestAmerica Buffalo

TAL DEN = TestAmerica Denver

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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.

METHOD / ANALYST SUMMARY

Client: Aspect Consulting

Job Number: 280-95855-1

Method	Analyst	Analyst ID
SW846 8260C SIM	Farrell, Ryan J	RJF
SW846 6020	Mooney, Joseph C	JM
MCAWW 300.0	Phan, Thu L	TLP
MCAWW 350.1	Spedale, Morgan A	MAS
SM SM 2320B	Duplin, Alysha 1	A1D
SM SM 5310B	Jewell, Connie C	CCJ

SAMPLE SUMMARY

Client: Aspect Consulting

Job Number: 280-95855-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-95855-1	MW-7	Water	04/11/2017 0855	04/13/2017 0930
280-95855-2	MW-5	Water	04/11/2017 1015	04/13/2017 0930
280-95855-3	MW-12I	Water	04/11/2017 1145	04/13/2017 0930
280-95855-4	SW-1	Water	04/11/2017 1145	04/13/2017 0930
280-95855-5	SW-4	Water	04/11/2017 1225	04/13/2017 0930
280-95855-6	SW-6	Water	04/11/2017 1245	04/13/2017 0930
280-95855-7	SW-7	Water	04/11/2017 1500	04/13/2017 0930
280-95855-8	MW-13D	Water	04/11/2017 1405	04/13/2017 0930
280-95855-9	MW-14	Water	04/11/2017 1635	04/13/2017 0930
280-95855-10	MW-20D	Water	04/11/2017 1645	04/13/2017 0930
280-95855-11	MW-6	Water	04/11/2017 1725	04/13/2017 0930
280-95855-12TB	TRIP BLANK	Water	04/11/2017 0000	04/13/2017 0930

SAMPLE RESULTS

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: MW-7

Lab Sample ID: 280-95855-1 Date Sampled: 04/11/2017 0855
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2783.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1624			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1624				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	105		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: MW-5

Lab Sample ID: 280-95855-2 Date Sampled: 04/11/2017 1015
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2784.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1648			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1648				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	99		50 - 150
TBA-d9 (Surr)	101		50 - 150

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-12I**

Lab Sample ID: 280-95855-3
Client Matrix: Water

Date Sampled: 04/11/2017 1145
Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2785.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1713			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1713				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	0.077		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	101		50 - 150
TBA-d9 (Surr)	112		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: SW-1

Lab Sample ID: 280-95855-4 Date Sampled: 04/11/2017 1145
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2786.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1737			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1737				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	102		50 - 150
TBA-d9 (Surr)	105		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: SW-4

Lab Sample ID: 280-95855-5 Date Sampled: 04/11/2017 1225
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2787.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1801			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1801				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	107		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: SW-6

Lab Sample ID: 280-95855-6 Date Sampled: 04/11/2017 1245
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2788.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1826			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1826				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	101		50 - 150
TBA-d9 (Surr)	109		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: SW-7

Lab Sample ID: 280-95855-7 Date Sampled: 04/11/2017 1500
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2789.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1850			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1850				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	97		50 - 150
TBA-d9 (Surr)	105		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: MW-13D

Lab Sample ID: 280-95855-8 Date Sampled: 04/11/2017 1405
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2790.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1915			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1915				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	100		50 - 150
TBA-d9 (Surr)	108		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: MW-14

Lab Sample ID: 280-95855-9 Date Sampled: 04/11/2017 1635
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2791.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1939			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1939				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	0.10		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	101		50 - 150
TBA-d9 (Surr)	110		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: MW-20D

Lab Sample ID: 280-95855-10 Date Sampled: 04/11/2017 1645
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2792.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 2003			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 2003				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	0.097		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	116		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: MW-6

Lab Sample ID: 280-95855-11 Date Sampled: 04/11/2017 1725
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2793.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 2028			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 2028				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	0.096		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	112		50 - 150

Client: Aspect Consulting Job Number: 280-95855-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 280-95855-12TB Date Sampled: 04/11/2017 0000
Client Matrix: Water Date Received: 04/13/2017 0930

8260C SIM Volatile Organic Compounds (GC/MS)

Analysis Method:	8260C SIM	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	J2794.D
Dilution:	1.0			Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 2052			Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 2052				

Analyte	Result (ug/L)	Qualifier	RL
Vinyl chloride	ND		0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
Dibromofluoromethane (Surr)	98		50 - 150
TBA-d9 (Surr)	106		50 - 150

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-7**

Lab Sample ID: 280-95855-1
Client Matrix: Water

Date Sampled: 04/11/2017 0855
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	072SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2031			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	ND		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-5**

Lab Sample ID: 280-95855-2
Client Matrix: Water

Date Sampled: 04/11/2017 1015
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	077SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2050			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	ND		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-12I**

Lab Sample ID: 280-95855-3
Client Matrix: Water

Date Sampled: 04/11/2017 1145
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	078SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2054			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	54		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **SW-1**

Lab Sample ID: 280-95855-4
Client Matrix: Water

Date Sampled: 04/11/2017 1145
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	081SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2106			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	1.9		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **SW-4**

Lab Sample ID: 280-95855-5
Client Matrix: Water

Date Sampled: 04/11/2017 1225
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	082SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2110			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	38		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: SW-6

Lab Sample ID: 280-95855-6
Client Matrix: Water

Date Sampled: 04/11/2017 1245
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	083SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2113			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	26		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **SW-7**

Lab Sample ID: 280-95855-7
Client Matrix: Water

Date Sampled: 04/11/2017 1500
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	084SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2117			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	3.7		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-13D**

Lab Sample ID: 280-95855-8
Client Matrix: Water

Date Sampled: 04/11/2017 1405
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	085SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2121			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	26		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-14**

Lab Sample ID: 280-95855-9
Client Matrix: Water

Date Sampled: 04/11/2017 1635
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	086SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2125			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	2600		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-20D**

Lab Sample ID: 280-95855-10
Client Matrix: Water

Date Sampled: 04/11/2017 1645
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	087SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2129			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	2700		1.0

Client: Aspect Consulting

Job Number: 280-95855-1

Client Sample ID: **MW-6**

Lab Sample ID: 280-95855-11
Client Matrix: Water

Date Sampled: 04/11/2017 1725
Date Received: 04/13/2017 0930

6020 Metals (ICP/MS)-Dissolved

Analysis Method:	6020	Analysis Batch:	280-369834	Instrument ID:	MT_078
Prep Method:	3005A	Prep Batch:	280-369331	Lab File ID:	088SMPL.d
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2132			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				

Analyte	Result (ug/L)	Qualifier	RL
Manganese	480		1.0

General Chemistry

Client Sample ID: MW-7

Lab Sample ID: 280-95855-1 Date Sampled: 04/11/2017 0855
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	1.8		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1441					
Nitrate	0.60	H	mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1441					
Orthophosphate as P-Dissolved	ND	H	mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1442					
Nitrite	ND	H	mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1441					
Sulfate	5.0		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1441					
Ammonia as N	ND	F1 F2	mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2026					
Total Alkalinity	160		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1902					
Bicarbonate Alkalinity	160		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1902					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1902					
Total Organic Carbon - Average	1.4		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2045					

General Chemistry

Client Sample ID: MW-5

Lab Sample ID: 280-95855-2 Date Sampled: 04/11/2017 1015
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	2.8		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1621					
Nitrate	1.2	H	mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1621					
Orthophosphate as P-Dissolved	ND	H	mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1628					
Nitrite	ND	H	mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1621					
Sulfate	8.8		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1621					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2032					
Total Alkalinity	60		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1757					
Bicarbonate Alkalinity	60		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1757					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1757					
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2059					

General Chemistry

Client Sample ID: MW-12I

Lab Sample ID: 280-95855-3 Date Sampled: 04/11/2017 1145
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	3.3		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1209					
Nitrate	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1209					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1201					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1209					
Sulfate	5.8		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1209					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2048					
Total Alkalinity	83		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1855					
Bicarbonate Alkalinity	83		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1855					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1855					
Total Organic Carbon - Average	2.4		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2114					

General Chemistry

Client Sample ID: SW-1

Lab Sample ID: 280-95855-4 Date Sampled: 04/11/2017 1145
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	4.5		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1226					
Nitrate	1.6		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1226					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1219					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1226					
Sulfate	11		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1226					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2050					
Total Alkalinity	73		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1844					
Bicarbonate Alkalinity	73		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1844					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1844					
Total Organic Carbon - Average	2.9		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2158					

General Chemistry

Client Sample ID: SW-4

Lab Sample ID: 280-95855-5 Date Sampled: 04/11/2017 1225
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	11		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1243					
Nitrate	1.0		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1243					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1237					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1243					
Sulfate	16		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1243					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2052					
Total Alkalinity	120		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1850					
Bicarbonate Alkalinity	120		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1850					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1850					
Total Organic Carbon - Average	11		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2213					

General Chemistry

Client Sample ID: SW-6

Lab Sample ID: 280-95855-6 Date Sampled: 04/11/2017 1245
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	3.1		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1300					
Nitrate	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1300					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1255					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1300					
Sulfate	5.2		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1300					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2054					
Total Alkalinity	34		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1802					
Bicarbonate Alkalinity	34		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1802					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1802					
Total Organic Carbon - Average	19		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2228					

General Chemistry

Client Sample ID: SW-7

Lab Sample ID: 280-95855-7 Date Sampled: 04/11/2017 1500
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	3.1		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1317					
Nitrate	1.6		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1317					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1313					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1317					
Sulfate	6.5		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1317					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2056					
Total Alkalinity	35		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1746					
Bicarbonate Alkalinity	35		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1746					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1746					
Total Organic Carbon - Average	10		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2242					

General Chemistry

Client Sample ID: MW-13D

Lab Sample ID: 280-95855-8 Date Sampled: 04/11/2017 1405
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	6.2		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1333					
Nitrate	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1333					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1330					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1333					
Sulfate	18		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1333					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2058					
Total Alkalinity	77		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1740					
Bicarbonate Alkalinity	77		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1740					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1740					
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2326					

General Chemistry

Client Sample ID: MW-14

Lab Sample ID: 280-95855-9 Date Sampled: 04/11/2017 1635
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	8.7		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1350					
Nitrate	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1350					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1348					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1350					
Sulfate	20		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1350					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2100					
Total Alkalinity	140		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1808					
Bicarbonate Alkalinity	140		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1808					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1808					
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/18/2017 2343					

General Chemistry

Client Sample ID: MW-20D

Lab Sample ID: 280-95855-10 Date Sampled: 04/11/2017 1645
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	8.7		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1407					
Nitrate	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1407					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1406					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1407					
Sulfate	20		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1407					
Ammonia as N	ND		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2102					
Total Alkalinity	130		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1839					
Bicarbonate Alkalinity	130		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1839					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1839					
Total Organic Carbon - Average	ND		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/19/2017 0002					

General Chemistry

Client Sample ID: MW-6

Lab Sample ID: 280-95855-11 Date Sampled: 04/11/2017 1725
Client Matrix: Water Date Received: 04/13/2017 0930

Analyte	Result	Qual	Units	RL	Dil	Method
Chloride	9.3		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1424					
Nitrate	1.4		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1424					
Orthophosphate as P-Dissolved	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369233	Analysis Date: 04/13/2017 1424					
Nitrite	ND		mg/L	0.50	1.0	300.0
Analysis Batch: 280-369230	Analysis Date: 04/13/2017 1424					
Sulfate	28		mg/L	1.0	1.0	300.0
Analysis Batch: 280-369231	Analysis Date: 04/13/2017 1424					
Ammonia as N	0.096		mg/L	0.030	1.0	350.1
Analysis Batch: 280-370344	Analysis Date: 04/20/2017 2124					
Total Alkalinity	170		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1751					
Bicarbonate Alkalinity	170		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1751					
Carbonate Alkalinity	ND		mg/L	5.0	1.0	SM 2320B
Analysis Batch: 280-369603	Analysis Date: 04/14/2017 1751					
Total Organic Carbon - Average	1.4		mg/L	1.0	1.0	SM 5310B
Analysis Batch: 280-370039	Analysis Date: 04/19/2017 0018					

DATA REPORTING QUALIFIERS

Client: Aspect Consulting Job Number: 280-95855-1

Lab Section	Qualifier	Description
General Chemistry		
	F1	MS and/or MSD Recovery is outside acceptance limits.
	F2	MS/MSD RPD exceeds control limits
	H	Sample was prepped or analyzed beyond the specified holding time

QUALITY CONTROL RESULTS

Client: Aspect Consulting

Job Number: 280-95855-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:480-353092					
LCS 480-353092/5	Lab Control Sample	T	Water	8260C SIM	
LCSD 480-353092/6	Lab Control Sample Duplicate	T	Water	8260C SIM	
MB 480-353092/8	Method Blank	T	Water	8260C SIM	
280-95855-1	MW-7	T	Water	8260C SIM	
280-95855-2	MW-5	T	Water	8260C SIM	
280-95855-3	MW-12I	T	Water	8260C SIM	
280-95855-4	SW-1	T	Water	8260C SIM	
280-95855-5	SW-4	T	Water	8260C SIM	
280-95855-6	SW-6	T	Water	8260C SIM	
280-95855-7	SW-7	T	Water	8260C SIM	
280-95855-8	MW-13D	T	Water	8260C SIM	
280-95855-9	MW-14	T	Water	8260C SIM	
280-95855-10	MW-20D	T	Water	8260C SIM	
280-95855-11	MW-6	T	Water	8260C SIM	
280-95855-12TB	TRIP BLANK	T	Water	8260C SIM	
480-115815-I-8 MS	Matrix Spike	T	Water	8260C SIM	
480-115815-I-8 MSD	Matrix Spike Duplicate	T	Water	8260C SIM	

Report Basis
T = Total

Client: Aspect Consulting Job Number: 280-95855-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-369331					
LCS 280-369331/2-A	Lab Control Sample	R	Water	3005A	
MB 280-369331/1-A	Method Blank	R	Water	3005A	
280-95855-1	MW-7	D	Water	3005A	
280-95855-1MS	Matrix Spike	D	Water	3005A	
280-95855-1MSD	Matrix Spike Duplicate	D	Water	3005A	
280-95855-2	MW-5	D	Water	3005A	
280-95855-3	MW-12I	D	Water	3005A	
280-95855-4	SW-1	D	Water	3005A	
280-95855-5	SW-4	D	Water	3005A	
280-95855-6	SW-6	D	Water	3005A	
280-95855-7	SW-7	D	Water	3005A	
280-95855-8	MW-13D	D	Water	3005A	
280-95855-9	MW-14	D	Water	3005A	
280-95855-10	MW-20D	D	Water	3005A	
280-95855-11	MW-6	D	Water	3005A	
Analysis Batch:280-369834					
LCS 280-369331/2-A	Lab Control Sample	R	Water	6020	280-369331
MB 280-369331/1-A	Method Blank	R	Water	6020	280-369331
280-95855-1	MW-7	D	Water	6020	280-369331
280-95855-1MS	Matrix Spike	D	Water	6020	280-369331
280-95855-1MSD	Matrix Spike Duplicate	D	Water	6020	280-369331
280-95855-2	MW-5	D	Water	6020	280-369331
280-95855-3	MW-12I	D	Water	6020	280-369331
280-95855-4	SW-1	D	Water	6020	280-369331
280-95855-5	SW-4	D	Water	6020	280-369331
280-95855-6	SW-6	D	Water	6020	280-369331
280-95855-7	SW-7	D	Water	6020	280-369331
280-95855-8	MW-13D	D	Water	6020	280-369331
280-95855-9	MW-14	D	Water	6020	280-369331
280-95855-10	MW-20D	D	Water	6020	280-369331
280-95855-11	MW-6	D	Water	6020	280-369331

Report Basis
D = Dissolved
R = Total Recoverable

Client: Aspect Consulting Job Number: 280-95855-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-369230					
LCS 280-369230/4	Lab Control Sample	T	Water	300.0	
LCSD 280-369230/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-369230/6	Method Blank	T	Water	300.0	
280-95855-1	MW-7	T	Water	300.0	
280-95855-1DU	Duplicate	T	Water	300.0	
280-95855-1MS	Matrix Spike	T	Water	300.0	
280-95855-1MSD	Matrix Spike Duplicate	T	Water	300.0	
280-95855-2	MW-5	T	Water	300.0	
280-95855-2DU	Duplicate	T	Water	300.0	
280-95855-2MS	Matrix Spike	T	Water	300.0	
280-95855-2MSD	Matrix Spike Duplicate	T	Water	300.0	
280-95855-3	MW-12I	T	Water	300.0	
280-95855-4	SW-1	T	Water	300.0	
280-95855-5	SW-4	T	Water	300.0	
280-95855-6	SW-6	T	Water	300.0	
280-95855-7	SW-7	T	Water	300.0	
280-95855-8	MW-13D	T	Water	300.0	
280-95855-9	MW-14	T	Water	300.0	
280-95855-10	MW-20D	T	Water	300.0	
280-95855-11	MW-6	T	Water	300.0	
Analysis Batch:280-369231					
LCS 280-369231/4	Lab Control Sample	T	Water	300.0	
LCSD 280-369231/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-369231/6	Method Blank	T	Water	300.0	
280-95855-1	MW-7	T	Water	300.0	
280-95855-1DU	Duplicate	T	Water	300.0	
280-95855-1MS	Matrix Spike	T	Water	300.0	
280-95855-1MSD	Matrix Spike Duplicate	T	Water	300.0	
280-95855-2	MW-5	T	Water	300.0	
280-95855-2DU	Duplicate	T	Water	300.0	
280-95855-2MS	Matrix Spike	T	Water	300.0	
280-95855-2MSD	Matrix Spike Duplicate	T	Water	300.0	
280-95855-3	MW-12I	T	Water	300.0	
280-95855-4	SW-1	T	Water	300.0	
280-95855-5	SW-4	T	Water	300.0	
280-95855-6	SW-6	T	Water	300.0	
280-95855-7	SW-7	T	Water	300.0	
280-95855-8	MW-13D	T	Water	300.0	
280-95855-9	MW-14	T	Water	300.0	
280-95855-10	MW-20D	T	Water	300.0	
280-95855-11	MW-6	T	Water	300.0	

Client: Aspect Consulting Job Number: 280-95855-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-369233					
LCS 280-369233/4	Lab Control Sample	T	Water	300.0	
LCSD 280-369233/5	Lab Control Sample Duplicate	T	Water	300.0	
MB 280-369233/6	Method Blank	T	Water	300.0	
280-95855-1	MW-7	D	Water	300.0	
280-95855-1DU	Duplicate	D	Water	300.0	
280-95855-1MS	Matrix Spike	D	Water	300.0	
280-95855-1MSD	Matrix Spike Duplicate	D	Water	300.0	
280-95855-2	MW-5	D	Water	300.0	
280-95855-2DU	Duplicate	D	Water	300.0	
280-95855-2MS	Matrix Spike	D	Water	300.0	
280-95855-2MSD	Matrix Spike Duplicate	D	Water	300.0	
280-95855-3	MW-12I	D	Water	300.0	
280-95855-4	SW-1	D	Water	300.0	
280-95855-5	SW-4	D	Water	300.0	
280-95855-6	SW-6	D	Water	300.0	
280-95855-7	SW-7	D	Water	300.0	
280-95855-8	MW-13D	D	Water	300.0	
280-95855-9	MW-14	D	Water	300.0	
280-95855-10	MW-20D	D	Water	300.0	
280-95855-11	MW-6	D	Water	300.0	
Analysis Batch:280-369603					
LCS 280-369603/27	Lab Control Sample	T	Water	SM 2320B	
LCS 280-369603/4	Lab Control Sample	T	Water	SM 2320B	
MB 280-369603/28	Method Blank	T	Water	SM 2320B	
MB 280-369603/5	Method Blank	T	Water	SM 2320B	
280-95850-A-8 DU	Duplicate	T	Water	SM 2320B	
280-95855-1	MW-7	T	Water	SM 2320B	
280-95855-2	MW-5	T	Water	SM 2320B	
280-95855-3	MW-12I	T	Water	SM 2320B	
280-95855-4	SW-1	T	Water	SM 2320B	
280-95855-5	SW-4	T	Water	SM 2320B	
280-95855-6	SW-6	T	Water	SM 2320B	
280-95855-7	SW-7	T	Water	SM 2320B	
280-95855-8	MW-13D	T	Water	SM 2320B	
280-95855-9	MW-14	T	Water	SM 2320B	
280-95855-10	MW-20D	T	Water	SM 2320B	
280-95855-11	MW-6	T	Water	SM 2320B	

Client: Aspect Consulting Job Number: 280-95855-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-370039					
LCS 280-370039/3	Lab Control Sample	T	Water	SM 5310B	
MB 280-370039/4	Method Blank	T	Water	SM 5310B	
280-95855-1	MW-7	T	Water	SM 5310B	
280-95855-2	MW-5	T	Water	SM 5310B	
280-95855-3	MW-12I	T	Water	SM 5310B	
280-95855-3MS	Matrix Spike	T	Water	SM 5310B	
280-95855-3MSD	Matrix Spike Duplicate	T	Water	SM 5310B	
280-95855-4	SW-1	T	Water	SM 5310B	
280-95855-5	SW-4	T	Water	SM 5310B	
280-95855-6	SW-6	T	Water	SM 5310B	
280-95855-7	SW-7	T	Water	SM 5310B	
280-95855-8	MW-13D	T	Water	SM 5310B	
280-95855-9	MW-14	T	Water	SM 5310B	
280-95855-10	MW-20D	T	Water	SM 5310B	
280-95855-11	MW-6	T	Water	SM 5310B	
Analysis Batch:280-370344					
LCS 280-370344/47	Lab Control Sample	T	Water	350.1	
LCS 280-370344/88	Lab Control Sample	T	Water	350.1	
LCSD 280-370344/48	Lab Control Sample Duplicate	T	Water	350.1	
LCSD 280-370344/89	Lab Control Sample Duplicate	T	Water	350.1	
MB 280-370344/49	Method Blank	T	Water	350.1	
MB 280-370344/97	Method Blank	T	Water	350.1	
280-95855-1	MW-7	T	Water	350.1	
280-95855-1MS	Matrix Spike	T	Water	350.1	
280-95855-1MSD	Matrix Spike Duplicate	T	Water	350.1	
280-95855-2	MW-5	T	Water	350.1	
280-95855-3	MW-12I	T	Water	350.1	
280-95855-4	SW-1	T	Water	350.1	
280-95855-5	SW-4	T	Water	350.1	
280-95855-6	SW-6	T	Water	350.1	
280-95855-7	SW-7	T	Water	350.1	
280-95855-8	MW-13D	T	Water	350.1	
280-95855-9	MW-14	T	Water	350.1	
280-95855-10	MW-20D	T	Water	350.1	
280-95855-11	MW-6	T	Water	350.1	
280-95855-11MS	Matrix Spike	T	Water	350.1	
280-95855-11MSD	Matrix Spike Duplicate	T	Water	350.1	

Report Basis
D = Dissolved
T = Total

Surrogate Recovery Report

8260C SIM Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	TBA %Rec
280-95855-1	MW-7	98	105
280-95855-2	MW-5	99	101
280-95855-3	MW-12I	101	112
280-95855-4	SW-1	102	105
280-95855-5	SW-4	98	107
280-95855-6	SW-6	101	109
280-95855-7	SW-7	97	105
280-95855-8	MW-13D	100	108
280-95855-9	MW-14	101	110
280-95855-10	MW-20D	98	116
280-95855-11	MW-6	98	112
280-95855-12	TRIP BLANK	98	106
MB 480-353092/8		100	98
LCS 480-353092/5		72	104
LCSD 480-353092/6		72	103
480-115815-I-8 MS		100	115
480-115815-I-8 MSD		103	117

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	50-150
TBA = TBA-d9 (Surr)	50-150

Method Blank - Batch: 480-353092 **Method: 8260C SIM**
Preparation: 5030C

Lab Sample ID:	MB 480-353092/8	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J2781.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1528	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1528				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Vinyl chloride	ND		0.020

Surrogate	% Rec	Acceptance Limits
Dibromofluoromethane (Surr)	100	50 - 150
TBA-d9 (Surr)	98	50 - 150

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 480-353092 **Method: 8260C SIM**
Preparation: 5030C

LCS Lab Sample ID:	LCS 480-353092/5	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J2778.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1415	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1415				25 mL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 480-353092/6	Analysis Batch:	480-353092	Instrument ID:	HP5973J
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	J2779.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	25 mL
Analysis Date:	04/20/2017 1440	Units:	ug/L	Final Weight/Volume:	25 mL
Prep Date:	04/20/2017 1440				25 mL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Vinyl chloride	81	76	50 - 150	7	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Dibromofluoromethane (Surr)	72	72	50 - 150
TBA-d9 (Surr)	104	103	50 - 150

Client: Aspect Consulting

Job Number: 280-95855-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 480-353092

Method: 8260C SIM
Preparation: 5030C

LCS Lab Sample ID:	LCS 480-353092/5	Units: ug/L		LCSD Lab Sample ID:	LCSD 480-353092/6
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/20/2017 1415			Analysis Date:	04/20/2017 1440
Prep Date:	04/20/2017 1415			Prep Date:	04/20/2017 1440
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Vinyl chloride	0.200	0.200	0.162	0.151

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Dibromofluoromethane (Surr)	100	103	50 - 150
TBA-d9 (Surr)	115	117	50 - 150

Client: Aspect Consulting

Job Number: 280-95855-1

Method Blank - Batch: 280-369331

Method: 6020
Preparation: 3005A
Total Recoverable

Lab Sample ID:	MB 280-369331/1-A	Analysis Batch:	280-369834	Instrument ID:	MT_078
Client Matrix:	Water	Prep Batch:	280-369331	Lab File ID:	070_BLK.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2024	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Manganese	ND		1.0

Lab Control Sample - Batch: 280-369331

Method: 6020
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 280-369331/2-A	Analysis Batch:	280-369834	Instrument ID:	MT_078
Client Matrix:	Water	Prep Batch:	280-369331	Lab File ID:	071_LCS.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2028	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Manganese	40.0	43.4	108	85 - 117	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369331

Method: 6020
Preparation: 3005A
Dissolved

MS Lab Sample ID:	280-95855-1	Analysis Batch:	280-369834	Instrument ID:	MT_078
Client Matrix:	Water	Prep Batch:	280-369331	Lab File ID:	074SMPL.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2039			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-1	Analysis Batch:	280-369834	Instrument ID:	MT_078
Client Matrix:	Water	Prep Batch:	280-369331	Lab File ID:	075SMPL.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	04/17/2017 2043			Final Weight/Volume:	50 mL
Prep Date:	04/13/2017 2215				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Manganese	107	110	85 - 117	3	20		

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369331

Method: 6020
Preparation: 3005A
Dissolved

MS Lab Sample ID:	280-95855-1	Units: ug/L	MSD Lab Sample ID:	280-95855-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	04/17/2017 2039		Analysis Date:	04/17/2017 2043	
Prep Date:	04/13/2017 2215		Prep Date:	04/13/2017 2215	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Manganese	ND	40.0	40.0	42.8	44.1

Method Blank - Batch: 280-369230 **Method: 300.0**
Preparation: N/A

Lab Sample ID:	MB 280-369230/6	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	06.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1128	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Nitrate	ND		0.50
Nitrite	ND		0.50

Method Reporting Limit Check - Batch: 280-369230 **Method: 300.0**
Preparation: N/A

Lab Sample ID:	MRL 280-369230/3	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1037	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate	0.200	ND	109	50 - 150	
Nitrite	0.200	ND	96	50 - 150	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-369230 **Method: 300.0**
Preparation: N/A

LCS Lab Sample ID:	LCS 280-369230/4	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	04.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1054	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				
LCSD Lab Sample ID:	LCSD 280-369230/5	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	05.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1111	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Nitrate	96	96	90 - 110	0	10		
Nitrite	100	101	90 - 110	0	10		

Client: Aspect Consulting

Job Number: 280-95855-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-369230

Method: 300.0
Preparation: N/A

LCS Lab Sample ID:	LCS 280-369230/4	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-369230/5
Client Matrix:	Water		Client Matrix:	Water
Dilution:	1.0		Dilution:	1.0
Analysis Date:	04/13/2017 1054		Analysis Date:	04/13/2017 1111
Prep Date:	N/A		Prep Date:	N/A
Leach Date:	N/A		Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Nitrate	5.00	5.00	4.81	4.81
Nitrite	5.00	5.00	5.01	5.03

Client: Aspect Consulting Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369230

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	20.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1548			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-1	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	21.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1605			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrate	107	108	80 - 120	1	20		
Nitrite	111	112	80 - 120	1	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369230

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-2	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	24.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1800			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-2	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	25.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1817			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrate	102	106	80 - 120	3	20		
Nitrite	106	110	80 - 120	4	20		

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369230

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Units: mg/L		MSD Lab Sample ID:	280-95855-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2017 1548			Analysis Date:	04/13/2017 1605
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrate	0.60	5.00	5.00	5.95	5.99
Nitrite	ND	5.00	5.00	5.55	5.60

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369230

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-2	Units: mg/L		MSD Lab Sample ID:	280-95855-2
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2017 1800			Analysis Date:	04/13/2017 1817
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Nitrate	1.2	5.00	5.00	6.26	6.47
Nitrite	ND	5.00	5.00	5.29	5.51

Client: Aspect Consulting

Job Number: 280-95855-1

Duplicate - Batch: 280-369230

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-95855-1	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	19.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1531	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate	0.60	0.603	0.2	15	
Nitrite	ND	ND	NC	15	

Duplicate - Batch: 280-369230

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-95855-2	Analysis Batch:	280-369230	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	23.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1744	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate	1.2	1.17	0.2	15	
Nitrite	ND	ND	NC	15	

Client: Aspect Consulting

Job Number: 280-95855-1

Method Blank - Batch: 280-369231

Method: 300.0
Preparation: N/A

Lab Sample ID:	MB 280-369231/6	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	06.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1128	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Chloride	ND		1.0
Sulfate	ND		1.0

Method Reporting Limit Check - Batch: 280-369231

Method: 300.0
Preparation: N/A

Lab Sample ID:	MRL 280-369231/3	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1037	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	2.50	ND	104	50 - 150	
Sulfate	2.50	ND	104	50 - 150	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-369231

Method: 300.0
Preparation: N/A

LCS Lab Sample ID:	LCS 280-369231/4	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	04.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1054	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-369231/5	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	05.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1111	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Chloride	98	98	90 - 110	0	10		
Sulfate	98	98	90 - 110	0	10		

Client: Aspect Consulting

Job Number: 280-95855-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-369231

Method: 300.0
Preparation: N/A

LCS Lab Sample ID:	LCS 280-369231/4	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-369231/5
Client Matrix:	Water		Client Matrix:	Water
Dilution:	1.0		Dilution:	1.0
Analysis Date:	04/13/2017 1054		Analysis Date:	04/13/2017 1111
Prep Date:	N/A		Prep Date:	N/A
Leach Date:	N/A		Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Chloride	100	100	97.8	97.9
Sulfate	100	100	97.7	97.8

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369231

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	20.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1548			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-1	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	21.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1605			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chloride	109	110	80 - 120	0	20		
Sulfate	109	110	80 - 120	1	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369231

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-2	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	24.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1800			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-2	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	25.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1817			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chloride	104	108	80 - 120	3	20		
Sulfate	104	109	80 - 120	4	20		

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369231

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Units: mg/L		MSD Lab Sample ID:	280-95855-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2017 1548			Analysis Date:	04/13/2017 1605
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	1.8	25.0	25.0	29.1	29.2
Sulfate	5.0	25.0	25.0	32.2	32.4

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369231

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-2	Units: mg/L		MSD Lab Sample ID:	280-95855-2
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2017 1800			Analysis Date:	04/13/2017 1817
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Chloride	2.8	25.0	25.0	28.8	29.8
Sulfate	8.8	25.0	25.0	34.8	36.0

Client: Aspect Consulting

Job Number: 280-95855-1

Duplicate - Batch: 280-369231

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-95855-1	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	19.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1531	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	1.8	1.77	3	15	
Sulfate	5.0	4.98	0.5	15	

Duplicate - Batch: 280-369231

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-95855-2	Analysis Batch:	280-369231	Instrument ID:	WC_IonChrom8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	23.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1744	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	2.8	2.79	0.5	15	
Sulfate	8.8	8.76	0.6	15	

Client: Aspect Consulting Job Number: 280-95855-1

Method Blank - Batch: 280-369233

Method: 300.0
Preparation: N/A

Lab Sample ID:	MB 280-369233/6	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	06.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1134	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Orthophosphate as P-Dissolved	ND		0.50

Method Reporting Limit Check - Batch: 280-369233

Method: 300.0
Preparation: N/A

Lab Sample ID:	MRL 280-369233/3	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	03.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1040	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Orthophosphate as P-Dissolved	0.200	ND	83	50 - 150	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-369233

Method: 300.0
Preparation: N/A

LCS Lab Sample ID:	LCS 280-369233/4	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	04.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1058	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				
LCSD Lab Sample ID:	LCSD 280-369233/5	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	05.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1116	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Orthophosphate as P-Dissolved	91	92	90 - 110	1	10		

Client: Aspect Consulting

Job Number: 280-95855-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-369233

Method: 300.0
Preparation: N/A

LCS Lab Sample ID:	LCS 280-369233/4	Units: mg/L		LCSD Lab Sample ID:	LCSD 280-369233/5
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2017 1058			Analysis Date:	04/13/2017 1116
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Orthophosphate as P-Dissolved	5.00	5.00	4.57	4.60

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369233

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	20.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1553			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-1	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	21.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1611			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Orthophosphate as P-Dissolved	103	104	80 - 120	0	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369233

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-2	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	24.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1750			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-2	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	25.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1807			Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Orthophosphate as P-Dissolved	100	102	80 - 120	2	20		

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369233

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Units: mg/L		MSD Lab Sample ID:	280-95855-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2017 1553			Analysis Date:	04/13/2017 1611
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Orthophosphate as P-Dissolved	ND	5.00	5.00	5.17	5.19

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-369233

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	280-95855-2	Units: mg/L		MSD Lab Sample ID:	280-95855-2
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2017 1750			Analysis Date:	04/13/2017 1807
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Orthophosphate as P-Dissolved	ND	5.00	5.00	5.00	5.11

Client: Aspect Consulting

Job Number: 280-95855-1

Duplicate - Batch: 280-369233

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-95855-1	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	19.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1535	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Orthophosphate as P-Dissolved	ND	ND	NC	15	

Duplicate - Batch: 280-369233

Method: 300.0
Preparation: N/A

Lab Sample ID:	280-95855-2	Analysis Batch:	280-369233	Instrument ID:	WC_IonChrom7
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	23.0000.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2017 1732	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				25 uL
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Orthophosphate as P-Dissolved	ND	ND	NC	15	

Method Blank - Batch: 280-370344

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-370344/49	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/20/2017 1946	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Ammonia as N	ND		0.030

Method Blank - Batch: 280-370344

Method: 350.1
Preparation: N/A

Lab Sample ID:	MB 280-370344/97	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/20/2017 2122	Units:	mg/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Ammonia as N	ND		0.030

Client: Aspect Consulting Job Number: 280-95855-1

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-370344/47	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	04/20/2017 1942	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-370344/48	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	04/20/2017 1944	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Ammonia as N	96	103	90 - 110	7	10		

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-370344/88	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	04/20/2017 2104	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-370344/89	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	04/20/2017 2106	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Ammonia as N	91	92	90 - 110	1	10		

Client: Aspect Consulting

Job Number: 280-95855-1

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-370344/47	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-370344/48
Client Matrix:	Water		Client Matrix:	Water
Dilution:	1.0		Dilution:	1.0
Analysis Date:	04/20/2017 1942		Analysis Date:	04/20/2017 1944
Prep Date:	N/A		Prep Date:	N/A
Leach Date:	N/A		Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Ammonia as N	2.50	2.50	2.40	2.57

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

LCS Lab Sample ID:	LCS 280-370344/88	Units: mg/L	LCSD Lab Sample ID:	LCSD 280-370344/89
Client Matrix:	Water		Client Matrix:	Water
Dilution:	1.0		Dilution:	1.0
Analysis Date:	04/20/2017 2104		Analysis Date:	04/20/2017 2106
Prep Date:	N/A		Prep Date:	N/A
Leach Date:	N/A		Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Ammonia as N	2.50	2.50	2.26	2.29

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	04/20/2017 2028			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-1	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	04/20/2017 2030			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia as N	104	120	90 - 110	14	10		F1 F2

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-95855-11	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	04/20/2017 2126			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-11	Analysis Batch:	280-370344	Instrument ID:	WC_Alp 3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\042017B.R
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	04/20/2017 2128			Final Weight/Volume:	10 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia as N	95	106	90 - 110	10	10		

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-95855-1	Units: mg/L	MSD Lab Sample ID:	280-95855-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	04/20/2017 2028		Analysis Date:	04/20/2017 2030	
Prep Date:	N/A		Prep Date:	N/A	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual	
Ammonia as N	ND	1.00	1.00	1.04	1.20	F1 F2

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-370344

Method: 350.1
Preparation: N/A

MS Lab Sample ID:	280-95855-11	Units: mg/L	MSD Lab Sample ID:	280-95855-11	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	04/20/2017 2126		Analysis Date:	04/20/2017 2128	
Prep Date:	N/A		Prep Date:	N/A	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Ammonia as N	0.096	1.00	1.00	1.04	1.16

Client: Aspect Consulting

Job Number: 280-95855-1

Method Blank - Batch: 280-369603

Method: SM 2320B
Preparation: N/A

Lab Sample ID:	MB 280-369603/5	Analysis Batch:	280-369603	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	alk041417.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/14/2017 1610	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Total Alkalinity	ND		5.0
Bicarbonate Alkalinity	ND		5.0
Carbonate Alkalinity	ND		5.0

Method Blank - Batch: 280-369603

Method: SM 2320B
Preparation: N/A

Lab Sample ID:	MB 280-369603/28	Analysis Batch:	280-369603	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	alk041417.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/14/2017 1833	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Total Alkalinity	ND		5.0
Bicarbonate Alkalinity	ND		5.0
Carbonate Alkalinity	ND		5.0

Client: Aspect Consulting Job Number: 280-95855-1

Lab Control Sample - Batch: 280-369603 **Method: SM 2320B**
Preparation: N/A

Lab Sample ID:	LCS 280-369603/4	Analysis Batch:	280-369603	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	alk041417.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/14/2017 1604	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Alkalinity	200	194	97	90 - 110	

Lab Control Sample - Batch: 280-369603 **Method: SM 2320B**
Preparation: N/A

Lab Sample ID:	LCS 280-369603/27	Analysis Batch:	280-369603	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	alk041417.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/14/2017 1827	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Alkalinity	200	192	96	90 - 110	

Duplicate - Batch: 280-369603 **Method: SM 2320B**
Preparation: N/A

Lab Sample ID:	280-95850-A-8 DU	Analysis Batch:	280-369603	Instrument ID:	WC_AT2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	alk041417.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/14/2017 1621	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Alkalinity	150	159	4	10	

Client: Aspect Consulting

Job Number: 280-95855-1

Method Blank - Batch: 280-370039

Method: SM 5310B
Preparation: N/A

Lab Sample ID:	MB 280-370039/4	Analysis Batch:	280-370039	Instrument ID:	WC_SHI3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041817.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/18/2017 1707	Units:	mg/L	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL
Total Organic Carbon - Average	ND		1.0

Lab Control Sample - Batch: 280-370039

Method: SM 5310B
Preparation: N/A

Lab Sample ID:	LCS 280-370039/3	Analysis Batch:	280-370039	Instrument ID:	WC_SHI3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041817.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/18/2017 1653	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Organic Carbon - Average	25.0	25.4	102	88 - 112	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-370039

Method: SM 5310B
Preparation: N/A

MS Lab Sample ID:	280-95855-3	Analysis Batch:	280-370039	Instrument ID:	WC_SHI3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041817.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/18/2017 2129			Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	280-95855-3	Analysis Batch:	280-370039	Instrument ID:	WC_SHI3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	041817.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/18/2017 2144			Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Total Organic Carbon - Average	103	103	88 - 112	0	15		

Client: Aspect Consulting

Job Number: 280-95855-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-370039

Method: SM 5310B
Preparation: N/A

MS Lab Sample ID:	280-95855-3	Units: mg/L	MSD Lab Sample ID:	280-95855-3	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	04/18/2017 2129		Analysis Date:	04/18/2017 2144	
Prep Date:	N/A		Prep Date:	N/A	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Total Organic Carbon - Average	2.4	25.0	25.0	28.1	28.1

Client: Aspect Consulting Job Number: 280-95855-1

Laboratory Chronicle

Lab ID: 280-95855-1 **Client ID: MW-7**

Sample Date/Time: 04/11/2017 08:55 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-1		480-353092		04/20/2017 16:24	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-1		480-353092		04/20/2017 16:24	1	TAL BUF	RJF
P:3005A	280-95855-C-1-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-1-A		280-369834	280-369331	04/17/2017 20:31	1	TAL DEN	JM
A:300.0	280-95855-A-1		280-369230		04/13/2017 14:41	1	TAL DEN	TLP
A:300.0	280-95855-A-1		280-369231		04/13/2017 14:41	1	TAL DEN	TLP
A:300.0	280-95855-D-1		280-369233		04/13/2017 14:42	1	TAL DEN	TLP
A:350.1	280-95855-B-1		280-370344		04/20/2017 20:26	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-1		280-369603		04/14/2017 19:02	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-1		280-370039		04/18/2017 20:45	1	TAL DEN	CCJ

Lab ID: 280-95855-1 MS **Client ID: MW-7**

Sample Date/Time: 04/11/2017 08:55 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-95855-C-1-B MS		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-1-B MS		280-369834	280-369331	04/17/2017 20:39	1	TAL DEN	JM
A:300.0	280-95855-A-1 MS		280-369230		04/13/2017 15:48	1	TAL DEN	TLP
A:300.0	280-95855-A-1 MS		280-369231		04/13/2017 15:48	1	TAL DEN	TLP
A:300.0	280-95855-D-1 MS		280-369233		04/13/2017 15:53	1	TAL DEN	TLP
A:350.1	280-95855-B-1 MS		280-370344		04/20/2017 20:28	1	TAL DEN	MAS

Lab ID: 280-95855-1 MSD **Client ID: MW-7**

Sample Date/Time: 04/11/2017 08:55 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	280-95855-C-1-C MSD		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-1-C MSD		280-369834	280-369331	04/17/2017 20:43	1	TAL DEN	JM
A:300.0	280-95855-A-1 MSD		280-369230		04/13/2017 16:05	1	TAL DEN	TLP
A:300.0	280-95855-A-1 MSD		280-369231		04/13/2017 16:05	1	TAL DEN	TLP
A:300.0	280-95855-D-1 MSD		280-369233		04/13/2017 16:11	1	TAL DEN	TLP
A:350.1	280-95855-B-1 MSD		280-370344		04/20/2017 20:30	1	TAL DEN	MAS

Client: Aspect Consulting Job Number: 280-95855-1

Laboratory Chronicle

Lab ID: 280-95855-1 DU **Client ID: MW-7**

Sample Date/Time: 04/11/2017 08:55 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-95855-A-1 DU		280-369230		04/13/2017 15:31	1	TAL DEN	TLP
A:300.0	280-95855-A-1 DU		280-369231		04/13/2017 15:31	1	TAL DEN	TLP
A:300.0	280-95855-D-1 DU		280-369233		04/13/2017 15:35	1	TAL DEN	TLP

Lab ID: 280-95855-2 **Client ID: MW-5**

Sample Date/Time: 04/11/2017 10:15 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-2		480-353092		04/20/2017 16:48	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-2		480-353092		04/20/2017 16:48	1	TAL BUF	RJF
P:3005A	280-95855-C-2-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-2-A		280-369834	280-369331	04/17/2017 20:50	1	TAL DEN	JM
A:300.0	280-95855-A-2		280-369230		04/13/2017 16:21	1	TAL DEN	TLP
A:300.0	280-95855-A-2		280-369231		04/13/2017 16:21	1	TAL DEN	TLP
A:300.0	280-95855-D-2		280-369233		04/13/2017 16:28	1	TAL DEN	TLP
A:350.1	280-95855-B-2		280-370344		04/20/2017 20:32	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-2		280-369603		04/14/2017 17:57	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-2		280-370039		04/18/2017 20:59	1	TAL DEN	CCJ

Lab ID: 280-95855-2 MS **Client ID: MW-5**

Sample Date/Time: 04/11/2017 10:15 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-95855-D-2 MS		280-369233		04/13/2017 17:50	1	TAL DEN	TLP
A:300.0	280-95855-A-2 MS		280-369230		04/13/2017 18:00	1	TAL DEN	TLP
A:300.0	280-95855-A-2 MS		280-369231		04/13/2017 18:00	1	TAL DEN	TLP

Lab ID: 280-95855-2 MSD **Client ID: MW-5**

Sample Date/Time: 04/11/2017 10:15 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-95855-D-2 MSD		280-369233		04/13/2017 18:07	1	TAL DEN	TLP
A:300.0	280-95855-A-2 MSD		280-369230		04/13/2017 18:17	1	TAL DEN	TLP
A:300.0	280-95855-A-2 MSD		280-369231		04/13/2017 18:17	1	TAL DEN	TLP

Client: Aspect Consulting Job Number: 280-95855-1

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Lab ID: 280-95855-2 DU **Client ID: MW-5**

Sample Date/Time: 04/11/2017 10:15 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	280-95855-D-2 DU		280-369233		04/13/2017 17:32	1	TAL DEN	TLP
A:300.0	280-95855-A-2 DU		280-369230		04/13/2017 17:44	1	TAL DEN	TLP
A:300.0	280-95855-A-2 DU		280-369231		04/13/2017 17:44	1	TAL DEN	TLP

Lab ID: 280-95855-3 **Client ID: MW-12I**

Sample Date/Time: 04/11/2017 11:45 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-3		480-353092		04/20/2017 17:13	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-3		480-353092		04/20/2017 17:13	1	TAL BUF	RJF
P:3005A	280-95855-C-3-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-3-A		280-369834	280-369331	04/17/2017 20:54	1	TAL DEN	JM
A:300.0	280-95855-D-3		280-369233		04/13/2017 12:01	1	TAL DEN	TLP
A:300.0	280-95855-A-3		280-369230		04/13/2017 12:09	1	TAL DEN	TLP
A:300.0	280-95855-A-3		280-369231		04/13/2017 12:09	1	TAL DEN	TLP
A:350.1	280-95855-B-3		280-370344		04/20/2017 20:48	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-3		280-369603		04/14/2017 18:55	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-3		280-370039		04/18/2017 21:14	1	TAL DEN	CCJ

Lab ID: 280-95855-3 MS **Client ID: MW-12I**

Sample Date/Time: 04/11/2017 11:45 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 5310B	280-95855-B-3 MS		280-370039		04/18/2017 21:29	1	TAL DEN	CCJ

Lab ID: 280-95855-3 MSD **Client ID: MW-12I**

Sample Date/Time: 04/11/2017 11:45 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 5310B	280-95855-B-3 MSD		280-370039		04/18/2017 21:44	1	TAL DEN	CCJ

Client: Aspect Consulting Job Number: 280-95855-1

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Lab ID: 280-95855-4 **Client ID: SW-1**

Sample Date/Time: 04/11/2017 11:45 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-4		480-353092		04/20/2017 17:37	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-4		480-353092		04/20/2017 17:37	1	TAL BUF	RJF
P:3005A	280-95855-C-4-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-4-A		280-369834	280-369331	04/17/2017 21:06	1	TAL DEN	JM
A:300.0	280-95855-D-4		280-369233		04/13/2017 12:19	1	TAL DEN	TLP
A:300.0	280-95855-A-4		280-369230		04/13/2017 12:26	1	TAL DEN	TLP
A:300.0	280-95855-A-4		280-369231		04/13/2017 12:26	1	TAL DEN	TLP
A:350.1	280-95855-B-4		280-370344		04/20/2017 20:50	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-4		280-369603		04/14/2017 18:44	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-4		280-370039		04/18/2017 21:58	1	TAL DEN	CCJ

Lab ID: 280-95855-5 **Client ID: SW-4**

Sample Date/Time: 04/11/2017 12:25 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-5		480-353092		04/20/2017 18:01	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-5		480-353092		04/20/2017 18:01	1	TAL BUF	RJF
P:3005A	280-95855-C-5-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-5-A		280-369834	280-369331	04/17/2017 21:10	1	TAL DEN	JM
A:300.0	280-95855-D-5		280-369233		04/13/2017 12:37	1	TAL DEN	TLP
A:300.0	280-95855-A-5		280-369230		04/13/2017 12:43	1	TAL DEN	TLP
A:300.0	280-95855-A-5		280-369231		04/13/2017 12:43	1	TAL DEN	TLP
A:350.1	280-95855-B-5		280-370344		04/20/2017 20:52	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-5		280-369603		04/14/2017 18:50	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-5		280-370039		04/18/2017 22:13	1	TAL DEN	CCJ

Lab ID: 280-95855-6 **Client ID: SW-6**

Sample Date/Time: 04/11/2017 12:45 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-6		480-353092		04/20/2017 18:26	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-6		480-353092		04/20/2017 18:26	1	TAL BUF	RJF
P:3005A	280-95855-C-6-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-6-A		280-369834	280-369331	04/17/2017 21:13	1	TAL DEN	JM
A:300.0	280-95855-D-6		280-369233		04/13/2017 12:55	1	TAL DEN	TLP
A:300.0	280-95855-A-6		280-369230		04/13/2017 13:00	1	TAL DEN	TLP
A:300.0	280-95855-A-6		280-369231		04/13/2017 13:00	1	TAL DEN	TLP
A:350.1	280-95855-B-6		280-370344		04/20/2017 20:54	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-6		280-369603		04/14/2017 18:02	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-6		280-370039		04/18/2017 22:28	1	TAL DEN	CCJ

Client: Aspect Consulting Job Number: 280-95855-1

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Lab ID: 280-95855-7 **Client ID: SW-7**

Sample Date/Time: 04/11/2017 15:00 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-7		480-353092		04/20/2017 18:50	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-7		480-353092		04/20/2017 18:50	1	TAL BUF	RJF
P:3005A	280-95855-C-7-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-7-A		280-369834	280-369331	04/17/2017 21:17	1	TAL DEN	JM
A:300.0	280-95855-D-7		280-369233		04/13/2017 13:13	1	TAL DEN	TLP
A:300.0	280-95855-A-7		280-369230		04/13/2017 13:17	1	TAL DEN	TLP
A:300.0	280-95855-A-7		280-369231		04/13/2017 13:17	1	TAL DEN	TLP
A:350.1	280-95855-B-7		280-370344		04/20/2017 20:56	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-7		280-369603		04/14/2017 17:46	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-7		280-370039		04/18/2017 22:42	1	TAL DEN	CCJ

Lab ID: 280-95855-8 **Client ID: MW-13D**

Sample Date/Time: 04/11/2017 14:05 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-8		480-353092		04/20/2017 19:15	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-8		480-353092		04/20/2017 19:15	1	TAL BUF	RJF
P:3005A	280-95855-C-8-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-8-A		280-369834	280-369331	04/17/2017 21:21	1	TAL DEN	JM
A:300.0	280-95855-D-8		280-369233		04/13/2017 13:30	1	TAL DEN	TLP
A:300.0	280-95855-A-8		280-369230		04/13/2017 13:33	1	TAL DEN	TLP
A:300.0	280-95855-A-8		280-369231		04/13/2017 13:33	1	TAL DEN	TLP
A:350.1	280-95855-B-8		280-370344		04/20/2017 20:58	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-8		280-369603		04/14/2017 17:40	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-8		280-370039		04/18/2017 23:26	1	TAL DEN	CCJ

Lab ID: 280-95855-9 **Client ID: MW-14**

Sample Date/Time: 04/11/2017 16:35 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-9		480-353092		04/20/2017 19:39	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-9		480-353092		04/20/2017 19:39	1	TAL BUF	RJF
P:3005A	280-95855-C-9-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-9-A		280-369834	280-369331	04/17/2017 21:25	1	TAL DEN	JM
A:300.0	280-95855-D-9		280-369233		04/13/2017 13:48	1	TAL DEN	TLP
A:300.0	280-95855-A-9		280-369230		04/13/2017 13:50	1	TAL DEN	TLP
A:300.0	280-95855-A-9		280-369231		04/13/2017 13:50	1	TAL DEN	TLP
A:350.1	280-95855-B-9		280-370344		04/20/2017 21:00	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-9		280-369603		04/14/2017 18:08	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-9		280-370039		04/18/2017 23:43	1	TAL DEN	CCJ

Client: Aspect Consulting Job Number: 280-95855-1

Laboratory Chronicle

Lab ID: 280-95855-10 **Client ID: MW-20D**

Sample Date/Time: 04/11/2017 16:45 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-10		480-353092		04/20/2017 20:03	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-10		480-353092		04/20/2017 20:03	1	TAL BUF	RJF
P:3005A	280-95855-C-10-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-10-A		280-369834	280-369331	04/17/2017 21:29	1	TAL DEN	JM
A:300.0	280-95855-D-10		280-369233		04/13/2017 14:06	1	TAL DEN	TLP
A:300.0	280-95855-A-10		280-369230		04/13/2017 14:07	1	TAL DEN	TLP
A:300.0	280-95855-A-10		280-369231		04/13/2017 14:07	1	TAL DEN	TLP
A:350.1	280-95855-B-10		280-370344		04/20/2017 21:02	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-10		280-369603		04/14/2017 18:39	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-10		280-370039		04/19/2017 00:02	1	TAL DEN	CCJ

Lab ID: 280-95855-11 **Client ID: MW-6**

Sample Date/Time: 04/11/2017 17:25 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-G-11		480-353092		04/20/2017 20:28	1	TAL BUF	RJF
A:8260C SIM	280-95855-G-11		480-353092		04/20/2017 20:28	1	TAL BUF	RJF
P:3005A	280-95855-C-11-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	280-95855-C-11-A		280-369834	280-369331	04/17/2017 21:32	1	TAL DEN	JM
A:300.0	280-95855-A-11		280-369230		04/13/2017 14:24	1	TAL DEN	TLP
A:300.0	280-95855-A-11		280-369231		04/13/2017 14:24	1	TAL DEN	TLP
A:300.0	280-95855-D-11		280-369233		04/13/2017 14:24	1	TAL DEN	TLP
A:350.1	280-95855-B-11		280-370344		04/20/2017 21:24	1	TAL DEN	MAS
A:SM 2320B	280-95855-A-11		280-369603		04/14/2017 17:51	1	TAL DEN	A1D
A:SM 5310B	280-95855-B-11		280-370039		04/19/2017 00:18	1	TAL DEN	CCJ

Lab ID: 280-95855-11 MS **Client ID: MW-6**

Sample Date/Time: 04/11/2017 17:25 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-95855-B-11 MS		280-370344		04/20/2017 21:26	1	TAL DEN	MAS

Lab ID: 280-95855-11 MSD **Client ID: MW-6**

Sample Date/Time: 04/11/2017 17:25 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:350.1	280-95855-B-11 MSD		280-370344		04/20/2017 21:28	1	TAL DEN	MAS

Client: Aspect Consulting Job Number: 280-95855-1

Laboratory Chronicle

Lab ID: 280-95855-12 **Client ID: TRIP BLANK**

Sample Date/Time: 04/11/2017 00:00 Received Date/Time: 04/13/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	280-95855-D-12		480-353092		04/20/2017 20:52	1	TAL BUF	RJF
A:8260C SIM	280-95855-D-12		480-353092		04/20/2017 20:52	1	TAL BUF	RJF

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	MB 480-353092/8		480-353092		04/20/2017 15:28	1	TAL BUF	RJF
A:8260C SIM	MB 480-353092/8		480-353092		04/20/2017 15:28	1	TAL BUF	RJF
P:3005A	MB 280-369331/1-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	MB 280-369331/1-A		280-369834	280-369331	04/17/2017 20:24	1	TAL DEN	JM
A:300.0	MB 280-369230/6		280-369230		04/13/2017 11:28	1	TAL DEN	TLP
A:300.0	MB 280-369231/6		280-369231		04/13/2017 11:28	1	TAL DEN	TLP
A:300.0	MB 280-369233/6		280-369233		04/13/2017 11:34	1	TAL DEN	TLP
A:350.1	MB 280-370344/49		280-370344		04/20/2017 19:46	1	TAL DEN	MAS
A:350.1	MB 280-370344/97		280-370344		04/20/2017 21:22	1	TAL DEN	MAS
A:SM 2320B	MB 280-369603/5		280-369603		04/14/2017 16:10	1	TAL DEN	A1D
A:SM 2320B	MB 280-369603/28		280-369603		04/14/2017 18:33	1	TAL DEN	A1D
A:SM 5310B	MB 280-370039/4		280-370039		04/18/2017 17:07	1	TAL DEN	CCJ

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	LCS 480-353092/5		480-353092		04/20/2017 14:15	1	TAL BUF	RJF
A:8260C SIM	LCS 480-353092/5		480-353092		04/20/2017 14:15	1	TAL BUF	RJF
P:3005A	LCS 280-369331/2-A		280-369834	280-369331	04/13/2017 22:15	1	TAL DEN	SUR
A:6020	LCS 280-369331/2-A		280-369834	280-369331	04/17/2017 20:28	1	TAL DEN	JM
A:300.0	LCS 280-369230/4		280-369230		04/13/2017 10:54	1	TAL DEN	TLP
A:300.0	LCS 280-369231/4		280-369231		04/13/2017 10:54	1	TAL DEN	TLP
A:300.0	LCS 280-369233/4		280-369233		04/13/2017 10:58	1	TAL DEN	TLP
A:350.1	LCS 280-370344/47		280-370344		04/20/2017 19:42	1	TAL DEN	MAS
A:350.1	LCS 280-370344/88		280-370344		04/20/2017 21:04	1	TAL DEN	MAS
A:SM 2320B	LCS 280-369603/4		280-369603		04/14/2017 16:04	1	TAL DEN	A1D
A:SM 2320B	LCS 280-369603/27		280-369603		04/14/2017 18:27	1	TAL DEN	A1D
A:SM 5310B	LCS 280-370039/3		280-370039		04/18/2017 16:53	1	TAL DEN	CCJ

Client: Aspect Consulting Job Number: 280-95855-1

Laboratory Chronicle

Lab ID: LCSD **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	LCSD 480-353092/6		480-353092		04/20/2017 14:40	1	TAL BUF	RJF
A:8260C SIM	LCSD 480-353092/6		480-353092		04/20/2017 14:40	1	TAL BUF	RJF
A:300.0	LCSD 280-369230/5		280-369230		04/13/2017 11:11	1	TAL DEN	TLP
A:300.0	LCSD 280-369231/5		280-369231		04/13/2017 11:11	1	TAL DEN	TLP
A:300.0	LCSD 280-369233/5		280-369233		04/13/2017 11:16	1	TAL DEN	TLP
A:350.1	LCSD 280-370344/48		280-370344		04/20/2017 19:44	1	TAL DEN	MAS
A:350.1	LCSD 280-370344/89		280-370344		04/20/2017 21:06	1	TAL DEN	MAS

Lab ID: MRL **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:300.0	MRL 280-369230/3		280-369230		04/13/2017 10:37	1	TAL DEN	TLP
A:300.0	MRL 280-369231/3		280-369231		04/13/2017 10:37	1	TAL DEN	TLP
A:300.0	MRL 280-369233/3		280-369233		04/13/2017 10:40	1	TAL DEN	TLP

Lab ID: MS **Client ID: N/A**

Sample Date/Time: 04/06/2017 10:45 Received Date/Time: 04/07/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-115815-I-8 MS		480-353092		04/20/2017 21:40	5	TAL BUF	RJF
A:8260C SIM	480-115815-I-8 MS		480-353092		04/20/2017 21:40	5	TAL BUF	RJF

Lab ID: MSD **Client ID: N/A**

Sample Date/Time: 04/06/2017 10:45 Received Date/Time: 04/07/2017 09:30

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	480-115815-I-8 MSD		480-353092		04/20/2017 22:05	5	TAL BUF	RJF
A:8260C SIM	480-115815-I-8 MSD		480-353092		04/20/2017 22:05	5	TAL BUF	RJF

Lab ID: DU **Client ID: N/A**

Sample Date/Time: 04/11/2017 15:01 Received Date/Time: 04/13/2017 07:15

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:SM 2320B	280-95850-A-8 DU		280-369603		04/14/2017 16:21	1	TAL DEN	A1D

Lab References:
TAL BUF = TestAmerica Buffalo
TAL DEN = TestAmerica Denver

Analytical Resources, Incorporated
Analytical Chemists and Consultants

26 April 2017

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.

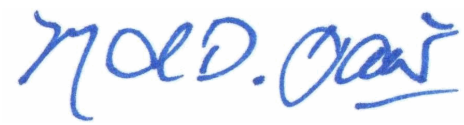
Associated Work Order(s)	Associated SDG ID(s)
17D0186	N/A

Mark Harris
Digitally signed by Mark Harris
DN: c=US, st=Washington, l=Tukwila, o=Analytical Resources, Inc., ou=Client Services, cn=Mark Harris, email=markh@arilabs.com
Date: 2017.04.26 11:00:26 -07'00'

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 reqirements 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.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in it entirety.

ACCREDITED IN ACCORDANCE WITH nelac
Cert# 100006

PJLA Testing
Accreditation # 66169

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

17D0186

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Aaron Pruitt	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-23414-6845.1
Client Contact:	Phone: 206-595-6615	E-Mail: betsy.sara@testamericainc.com		Page: 1/1
Company: Aspect Consulting, LLC				Job #: 160423
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:	WO #:			
Project Name: Hansville Landfill	Project #:skip sites/events 28006013 - 2Q/3Q/4Q Sampling			
Site: Washington	SSOW#:			

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/NO3/NO3(IC)	Ortho-phosphate (field filtered)	Dissolved Arsenice (Direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	S	N	N	D		
MW-7	4/11/17	0855		W	Y	Y						X		Short Holds: NO3/NO2(IC), Orthophosphate (IC)
MW-5		1015		W	Y	Y						X		
MW-12I		1145		W	Y	Y						X		Dissolved Arsenic subbed direct to ARI
SW-1		1145		W	Y	Y						X		
SW-4		1225		W	Y	Y						X		
SW-6		1245		W	Y	Y						X		
SW-7		1500		W	Y	Y						X		
MW-13D		1405		W	Y	Y						X		
MW-14		1635		W	Y	Y						X		
MW-20D		1645		W	Y	Y						X		
MW-6		1725		W	Y	Y						X		

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 - Na2S2SO3
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:

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	Meghan Rawson	4.12.17 11:38	Aspect	Paul Hunter	4/12/2017 11:38	ARI
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:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: TestAmerica Denver

Project Name: Hansville Landfill

COC No(s): _____ NA

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

Assigned ARI Job No: 17D0186

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to 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) 9.0

Time: _____

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

Temp Gun ID#: 000527b

Cooler Accepted by: PM Date: 4/12/2017 Time: 11:38

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)
Were all bottles sealed in individual plastic bags?		(YES)	NO
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)		

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: B.H. Date: 4/13/17 Time: 7:08

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

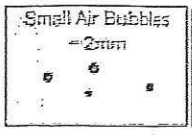
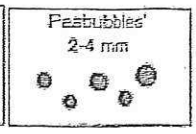
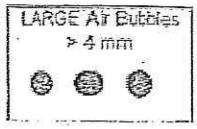
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
MW-20DD-041117	MW-20D		

Additional Notes, Discrepancies, & Resolutions:

All sample IDs had -041117 added to the end of it. ~~Samples~~ B.H. 4/13/17

~~time on sample MW-6 said 1725, COC time~~

By: B.H. Date: 4/13/17

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
		

Small → "sm" (< 2 mm)

Peabubbles → "pb" (2 to < 4 mm)

Large → "lg" (4 to < 6 mm)

Headspace → "hs" (> 6 mm)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

17D0186

Cooler#: 1	Temperature(°C): 9.0	
Sample ID	Bottle Count	Bottle Type
All samples in cooler are above 6°C		

Cooler#:	Temperature(°C):	
Sample ID	Bottle Count	Bottle Type

Cooler#:	Temperature(°C):	
Sample ID	Bottle Count	Bottle Type

Cooler#:	Temperature(°C):	
Sample ID	Bottle Count	Bottle Type

Completed by: PM Date: 4/12/2017 Time: 11:42

WORK ORDER

17D0186

Client: Test America - Denver | **Project Manager:** Mark Harris

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

Preservation Confirmation

Container ID	Container Type	pH		
17D0186-01 A	Miscellaneous Container	HNO_3	<2	Pass
17D0186-02 A	Miscellaneous Container			
17D0186-03 A	Miscellaneous Container			
17D0186-04 A	Miscellaneous Container			
17D0186-05 A	Miscellaneous Container			
17D0186-06 A	Miscellaneous Container			
17D0186-07 A	Miscellaneous Container			
17D0186-08 A	Miscellaneous Container			
17D0186-09 A	Miscellaneous Container			
17D0186-10 A	Miscellaneous Container			
17D0186-11 A	Miscellaneous Container			

B.H. — Preservation Confirmed By

4/13/17 — Date

B.H. — Reviewed By

4/13/17 — Date

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-7	17D0186-01	Water	11-Apr-2017 08:55	12-Apr-2017 11:38
MW-5	17D0186-02	Water	11-Apr-2017 10:15	12-Apr-2017 11:38
MW-12I	17D0186-03	Water	11-Apr-2017 11:45	12-Apr-2017 11:38
SW-1	17D0186-04	Water	11-Apr-2017 11:45	12-Apr-2017 11:38
SW-4	17D0186-05	Water	11-Apr-2017 12:25	12-Apr-2017 11:38
SW-6	17D0186-06	Water	11-Apr-2017 12:45	12-Apr-2017 11:38
SW-7	17D0186-07	Water	11-Apr-2017 15:00	12-Apr-2017 11:38
MW-13D	17D0186-08	Water	11-Apr-2017 14:05	12-Apr-2017 11:38
MW-14	17D0186-09	Water	11-Apr-2017 16:35	12-Apr-2017 11:38
MW-20D	17D0186-10	Water	11-Apr-2017 16:45	12-Apr-2017 11:38
MW-6	17D0186-11	Water	11-Apr-2017 17:25	12-Apr-2017 11:38

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Case Narrative

Client: Test America - Denver
Project: Hansville
Workorder: 17D0186

Sample receipt

The samples listed on the preceding page were received 12-Apr-2017 11:38 under ARI work order 17D0186. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Dissolved Arsenic - EPA Method 200.8

These samples were digested and analyzed within the recommended holding time.

All initial and continuing calibrations were within method requirements.

The areas for all internal standards were within acceptable QC limits.

Arsenic was not detected in the method blanks above the LOQs.

The percent recoveries for arsenic were within acceptable QC limits for the LCSs.

Matrix spikes (MSs) were prepared and analyzed in conjunction with samples 'MW-7' and 'MW-5'. The percent recoveries for arsenic were within acceptable QC limits for the MSs.

Matrix duplicates (MDs) were prepared and analyzed in conjunction with samples 'MW-7' and 'MW-5'. The RPDs for arsenic were within acceptable QC limits for the MDs.

4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 08:55
Instrument: ICPMS2 — Analyzed: 17-Apr-2017 18:31

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0371 — Sample Size: 100 mL
Prepared: 17-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.000967**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 10:15
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 17:59

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.00184**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 11:45
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 17:29

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.00211**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 11:45
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 17:34

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.00145**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 12:25
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 17:39

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.00185**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 12:45
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 17:44

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.00233**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 15:00
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 17:49

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.000937**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 14:05
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 18:27

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.00423**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 16:35
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 18:32

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.0169**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 16:45
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 18:37

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.0172**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved)

Method: EPA 200.8 UCT-KED — Sampled: 04/11/2017 17:25
Instrument: ICPMS2 — Analyzed: 21-Apr-2017 18:42

Sample Preparation: Preparation Method: RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x
Preparation Batch: BFD0486 — Sample Size: 100 mL
Prepared: 20-Apr-2017 — Final Volume: 20 mL

Analyte	CAS Number	Dilution	Reporting Limit	Result	Units	Notes
Arsenic, Dissolved	7440-38-2	1	0.0000400	**0.00184**	mg/L	

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Metals and Metallic Compounds (dissolved) - Quality Control

Batch BFD0371 - RHN EPA 600/4-79-020 4.1.4 HNO3 matrix 5x

Instrument: ICPMS2

QC Sample/Analyte	Isotope	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BFD0371-BLK1)				Prepared: 17-Apr-2017 Analyzed: 17-Apr-2017 18:21							
Arsenic, Dissolved	75a	ND	0.0000400	mg/L							U
LCS (BFD0371-BS1)				Prepared: 17-Apr-2017 Analyzed: 17-Apr-2017 18:41							
Arsenic, Dissolved	75a	0.00431	0.0000400	mg/L	0.00500		86.2	80-120			
Duplicate (BFD0371-DUP1)		**Source: 17D0186-01**		Prepared: 17-Apr-2017 Analyzed: 17-Apr-2017 18:26							
Arsenic, Dissolved	75a	0.000923	0.0000400	mg/L		0.000967			4.70	20	
Matrix Spike (BFD0371-MS1)		**Source: 17D0186-01**		Prepared: 17-Apr-2017 Analyzed: 17-Apr-2017 18:36							
Arsenic, Dissolved	75a	0.00529	0.0000400	mg/L	0.00500	0.000967	86.5	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: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Blank (BFD0486-BLK1)					Prepared: 20-Apr-2017 Analyzed: 21-Apr-2017 17:24				
Arsenic, Dissolved	75a	ND	0.0000400	mg/L					U
LCS (BFD0486-BS1)					Prepared: 20-Apr-2017 Analyzed: 21-Apr-2017 18:09				
Arsenic, Dissolved	75a	0.00499	0.0000400	mg/L	0.00500		99.7	80-120	
Duplicate (BFD0486-DUP1)		**Source: 17D0186-02**			Prepared: 20-Apr-2017 Analyzed: 21-Apr-2017 17:54				
Arsenic, Dissolved	75a	0.00178	0.0000400	mg/L		0.00184		3.44	20
Matrix Spike (BFD0486-MS1)		**Source: 17D0186-02**			Prepared: 20-Apr-2017 Analyzed: 21-Apr-2017 18:04				
Arsenic, Dissolved	75a	0.00669	0.0000400	mg/L	0.00500	0.00184	97.0	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: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Certified Analyses included in this Report

Analyte	Certifications
EPA 200.8 UCT-KED in Water	
Arsenic-75a	NELAP,WADOE,WA-DW,DoD-ELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	UST-033	05/06/2017
CALAP	California Department of Public Health CAELAP	2748	02/28/2018
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	03/30/2017
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006	05/11/2017
WADOE	WA Dept of Ecology	C558	06/30/2017
WA-DW	Ecology - Drinking Water	C558	06/30/2017

Test America - Denver	Project: Hansville	
4955 Yarrow Street	Project Number: [none]	**Reported:**
Arvada CO, 80002	Project Manager: Betsy Sara	26-Apr-2017 10:59

Notes and Definitions

U	This analyte is not detected above the applicable reporting or detection limit.
J	Estimated concentration value detected below the reporting limit.
D	The reported value is from a dilution
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

280-95855 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Aaron Pruitt	Lab PM: Sara, Betsy A	IC No: 30-23414-6845.1
Client Contact:	Phone: 206-595-6615	E-Mail: betsy.sara@testamericainc.com	Page: 1/1
Company: Aspect Consulting, LLC		**Analysis Requested**	Job #: 160423
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:	WO #:		
Project Name: Hansville Landfill	Project #:skip sites/events 28006013 - 2Q/3Q/4Q Sampling		
Site: Washington	SSOW#:		

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 - Na2S2SO3
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	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/NO3/NO3(IC)	Ortho-phosphate (field filtered)	Dissolved Arsenic (Direct sub to ARI)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	S	N	N	D		
MW-7	4/11/17	0855		W	Y		X	X	X	X	X	X		Short Holds: NO3/NO2(IC), Orthophosphate (IC)
MW-5		1015		W	Y		X	X	X	X	X	X		
MW-12I		1145		W	Y		X	X	X	X	X	X		Dissolved Arsenic subbed direct to ARI
SW-1		1145		W	Y		X	X	X	X	X	X		
SW-4		1225		W	Y		X	X	X	X	X	X		
~~SW-6~~		1245		W	Y		X	X	X	X	X	X		2 of 6 Trip Blanks
SW-7		1500		W	Y		X	X	X	X	X	X		broken in delivery
MW-13D		1405		W	Y		X	X	X	X	X	X		
MW-14		1635		W	Y		X	X	X	X	X	X		
MW-20D		1645		W	Y		X	X	X	X	X	X		
MW-6		1725		W	Y		X	X	X	X	X	X		

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: Aaron Pruitt	Date/Time: 4/12/17 0900	Company: Aspect	Received by: Reed Pott
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Received by: Reed Pott	Date/Time: 4-13-17 0930	Company: TAD		
Received 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: 7.2, 10.6, 6.6 IR#700 Transfer RP 4-13-17

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-394236.1
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 #: 280-95855-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 4/25/2017			
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	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
MW-7 (280-95855-1)	4/11/17	08:55 Pacific		Water			X	3	
MW-5 (280-95855-2)	4/11/17	10:15 Pacific		Water			X	3	
MW-12I (280-95855-3)	4/11/17	11:45 Pacific		Water			X	3	
SW-1 (280-95855-4)	4/11/17	11:45 Pacific		Water			X	3	
SW-4 (280-95855-5)	4/11/17	12:25 Pacific		Water			X	3	
SW-6 (280-95855-6)	4/11/17	12:45 Pacific		Water			X	3	
SW-7 (280-95855-7)	4/11/17	15:00 Pacific		Water			X	3	
MW-13D (280-95855-8)	4/11/17	14:05 Pacific		Water			X	3	
MW-14 (280-95855-9)	4/11/17	16:35 Pacific		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. 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 TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

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
1	[signature]	4/13/17 1630	TAD	[signature]	4/14/17 0945	TA Buf
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: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 2.9° C

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sara, Betsy A	Carrier Tracking No(s):	COC No: 280-394236.2
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 #: 280-95855-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 4/25/2017			
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	Total Number of containers	Special Instructions/Note:
		Preservation Code:							
MW-20D (280-95855-10)	4/11/17	16:45 Pacific		Water			X	3	
MW-6 (280-95855-11)	4/11/17	17:25 Pacific		Water			X	3	
TRIP BLANK (280-95855-12)	4/11/17	Pacific		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. 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 TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

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
1	[signature]	4/13/17 1630	TAL	[signature]	4/14/17 0945	TAL DP
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: #1 2.9°

Login Sample Receipt Checklist

Client: Aspect Consulting

Job Number: 280-95855-1

Login Number: 95855
List Number: 1
Creator: Pottruff, Reed W

List Source: TestAmerica Denver

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.	False	No: Water present in cooler; indicates evidence of melted ice
Cooler Temperature is acceptable.	False	
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.	False	No: Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (Excluding tests with immediate HTs)..	False	
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: 280-95855-1

Login Number: 95855
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 04/14/17 03:42 PM

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	2.9 #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.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	